

NATIONAL MAGAZINE

Mostly About People

An Illustrated American Monthly



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Joe Chapple's

NATIONAL MAGAZINE



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Henry P. Davison—Red Cross Crusader

The Lucky Star of Marcus Loew

Exploring Labrador with a Flying Boat

Richard Croker—Tammany's "Big Chief"

From the Cattle Range to the U. S. Senate

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NATIONAL MAGAZINE

Mostly About People

Vol. LI

JUNE, 1922

New Series No. 1

Articles of Timely Interest

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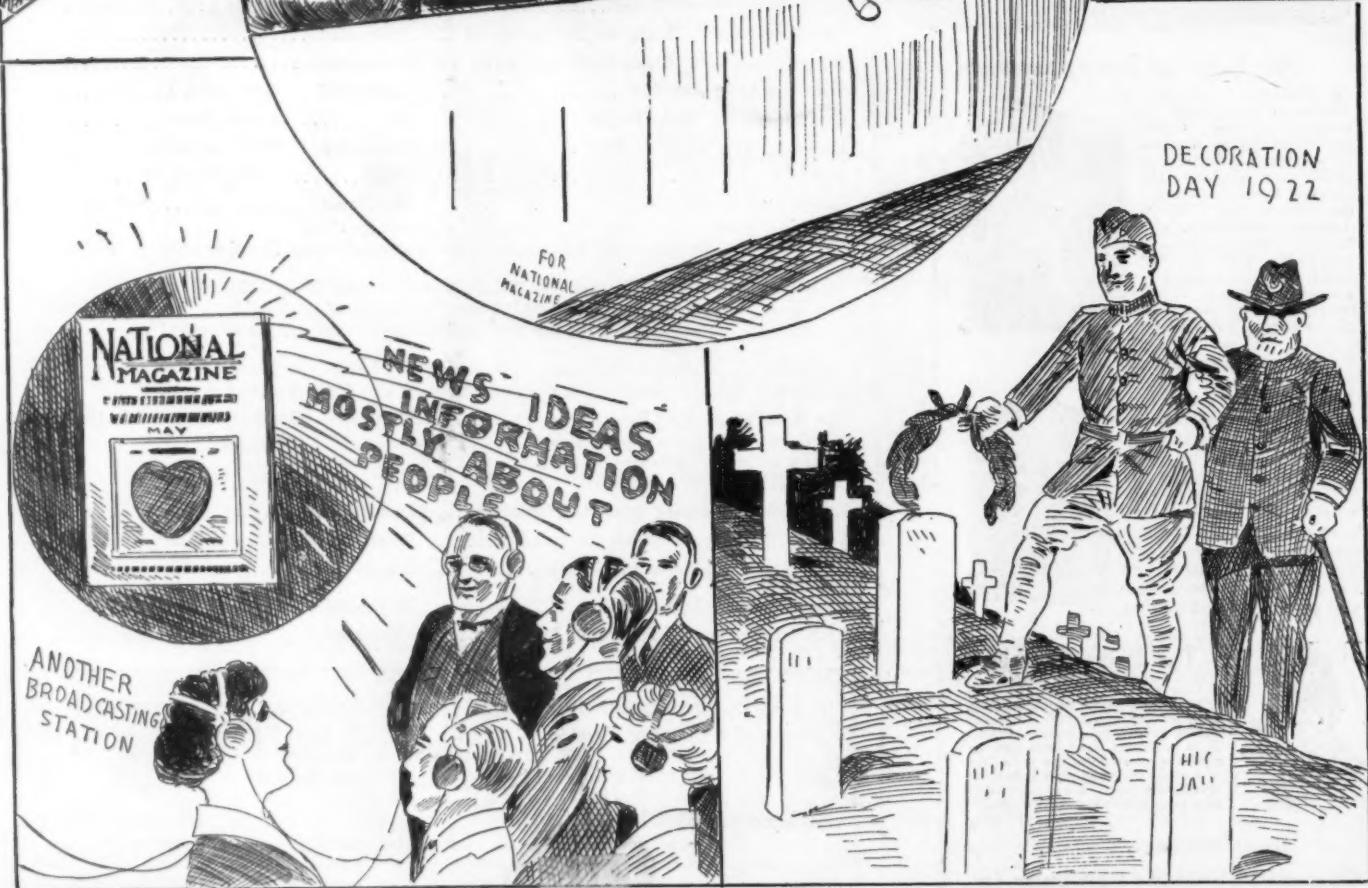
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Drawn for the NATIONAL MAGAZINE by Guido B. Janes

"WHAT'S ON OUR MINDS"



Affairs at Washington

By JOE MITCHELL CHAPPLER

IN the queenly glow of June-time, the blushing brides and grave bridegrooms visit Washington and form the high crest of the tourist tides. It is more than a tourist trip, for associated with the month of roses are memories that will remain traditions in many a household. How often in years to come reference will be made to the days "when we visited Washington." On the midnight coaches from New York and Philadelphia are thousands of young boys taking advantage of the low rate to see Washington, if only on a brief holiday Sunday. Interest in Washington is inherent with the average American. It is the Capital of his country—and her country—as the statute books read today. The impressions of these visitors, all of whom are constituents of some Congressmen or Senators, has more to do in indicating the tide of public sentiment than the investigations and hearings of politicians.

Naturally the center of interest clusters about the White House—the home of our President. Consequently, President Harding and the First Lady of the Land have had a busy month, greeting visitors. Well do they remember the time when they visited Washington together for the first time, and made a visit to the White House, and how disappointed they were that they could not meet the President of the United States. There is something so genuine and sincere in the host and hostess at the White House, that whatever may be done in a public way by the President, there will always be a feeling that he represents an honest and earnest conviction for the welfare and happiness of the home-makers of America. Every problem, however complicated or far-reaching, touching foreign or domestic affairs, comes back in the final analysis to the one great test—how will it effect the homes of the United States?

Apropos of this, I heard a boy playing "Home, Sweet Home" on his mouth organ as he approached the President to shake his hand.

* * * *

LITTLE do the people passing in and out of the Supreme Court room at the National Capitol, the old Senate chamber and the place where Webster delivered his famous reply to Hayne, realize that decisions are in the making here of historic importance.

The significant portion of the decisions of the Supreme Court on the Child Labor Law recalls the days of John Marshall, for it is a decision that is brought well within the range of popular understanding. Taxes cannot be made the medium of penalization, it is ruled. While there is popular approval of the purpose of the Child Labor Law, because it eliminates the injustice and unfairness that comes from various state statutes, child labor has long passed the necessity of a tax penalty as a means of enforcement.

One paragraph of the court's opinion has done much to clarify the muddle-thinking of many legislators, State and Federal, who, ardent in the pursuit of a cause entirely laudable, become blind to the safe and sane method of accomplishing enduring and permanent results.

Through his wide experience on the bench and in administrative work, Chief Justice Taft's presentation of the Court's opinion will have a more general reading by the people than has been given to court opinions in the past, because in dealing with the legal and constitutional aspect of the subject he has some knowledge of the trend of public thought and purpose. This, after all, eventually becomes the law of the land, irrespective of the decrees of hasty judgment on the



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MRS. CLIFFORD IRELAND AND CHILDREN

The family of Congressman Clifford Ireland of the 16th District of Illinois. Mrs. Ireland finds time in the midst of her manifold social engagements to write poetry of much more than average charm and feeling



HON. SCOTT C. BONE

Under his effective administration as Governor the territory of Alaska has made great strides along the road of industrial development

bench or the whirlpool rush of legislation. Reform legislation must conform to basic constitutional law, or it retards real progress.

* * * *

HE hails from Indiana. In Shelby County, the heart of Hoosierdom, Scott Cardelle Bone was born in 1860. He was the son of Deacon Alfred P. Bone—and he was a regular son of a deacon.

Some might say that he was educated in the public and high schools, but the truth is that his real education was in a print shop. After running the gamut in a country newspaper office, from the process of wetting down the paper to running a hand-press and, incidentally to writing poetry, he made his way to Indianapolis.

From 1881 to the year that Benjamin Harrison was elected President in 1888 he made the foundation for a notable newspaper career. Many a night through his hands passed the poems of James Whitcomb Riley in manuscript form, which he held for good "time copy" and Sunday features.

Then came the urge of the Capital, for politics comes naturally to one born in the Hoosier State. He went to the Capital and became news editor and managing editor of the Washington Post, which was considered the last word in authority in those days. In fact, it was Scott Bone who for seven years guided the destinies of the most influential paper at the Capital.

Later he became the principal owner of the Washington Herald. Then came the call of the West and he became editor-in-chief of the Seattle Post-Intelligencer. He was chairman of

the Alaska Bureau of the Seattle Chamber of Commerce for four years, and thereby hangs a tale.

He dreamed and talked Alaska day after day.

A delegate-at-large to the Republican National Convention in 1916 he took an active interest in national political affairs. When Will H. Hays was made chairman of the committee, he insisted on having Scott C. Bone with him as his right-hand man and adviser. In the meantime he was given a few decorations by Japan. He continued his writings.

During the campaign of 1920 he was very close to the center of things. When Warren G. Harding was nominated, Scott Bone directed a most effective literary and book campaign.

One of the first appointments made by President Harding was Scott Bone for Governor of Alaska. He accepted and immediately took up the work. What he has done in Alaska is already a matter of current history. His years of experience as head of the Alaska Bureau had fitted him for this work.

It is not to be wondered at that President Harding early manifested a wish to visit Alaska during his term of office, as a fitting sequel to his visit to Panama, thus touching the two extremes of the domain of the United States of America.

The whole situation in Alaska has been changed since the advent of the new governor. There is now a great hope of development. There has been an enlistment of the knowledge and courageous spirit of private enterprise to supplement the work and money already expended by the government in railroad and other development. The purchase of Alaska by William Henry Seward from Russia, after the Civil War, has proved to be one of the best purchases the United States ever made, and it is fitting that it should be still known as the "Seward Peninsula."

Our far-to-the-north peninsula of Alaska, with its small population and remoteness from the markets and centers of trade, furnishes an example to ancient Russia, with its cesspools of bolshevism. Alaska is on the way to development and happiness that comes to a people with honest work, honest living, and honest ideals.

The example of Alaska is already being watched with keen interest by Europe, and under the administration of Scott Bone some bright pages will be added to the history of the northern domain under the flag of Uncle Sam and on the continent that still remains under territorial government. The hope is that the forty-ninth state will be Alaska the glorious, Alaska the golden. It will mean that the dreams and plans of Governor Scott Bone have been consummated.

* * * *

ONE man in the United States had the simple distinction of "politician." By his own declaration, that was his profession, his business, and his life. He was Richard Croker. There was much of the firm and dogged element of leadership manifested in this man. He was much concerned about the situation in Ireland, and often said that he hoped to see the day when Ireland would be free. Once at Saratoga Springs he was attending a tea at the golf club with Mrs. Croker. He was asked what was the greatest thrill of his life. He turned and pointed to his wife: "This girl is the real thrill of my life."

His one hobby was horses. "I do love a horse that can step lively," was a frequent remark.

"Boss" Croker had clear blue eyes that could flash sternly and also beam in a kindly way. He enjoyed to the full the sunset of his life.

In the passing of "Boss" Croker a type of man has gone who figured conspicuously in American history. He was born in Clonakilty, County Cork, Ireland in 1841. He arrived at Castle Garden with wide open blue eyes at the age of seven. He attended the public schools in New York. He was a bright lad, and even in his early days at school gave evidence of his genius as an organizer.

Then he learned the trade of a machinist. At the age of twenty-four, right after the Civil War, he entered politics as a

life profession, starting as alderman in New York City in 1868. He was coroner for two terms, and fire commissioner in 1883. He was the opponent of the Tweed Ring, and early became prominent in Tammany Hall. For seventeen years he was its undisputed and absolute leader. He always gave as his New York address "Tammany Hall."

He was married to Elizabeth Frazier in 1873, and in 1914 married Bula Benton Edmondson, a Cherokee Indian girl from Oklahoma. He had always insisted that his work in Tammany, the gradations of which harked back to a tribe of Indians, was the reason that his idea of a woman was an Indian princess. The last eight years of his life he counted as the consummation of real happiness. His second marriage caused a bitter legal fight between his sons and family, but even at four score years he was just as ready for a fight and a contest as in the early days of Tammany.

He returned to Ireland to live in 1907, and died as he wished—on his native soil, amidst the stressful scenes following the creation of the new Free State of Ireland. He spent a great deal of time in the United States after 1907, making trips to his wonderful estate at Palm Beach, in which he took great interest.

"Boss" Croker did much for the Irish people who came to America. He had a big heart and a sense of justice, and was firm in his convictions—a sturdy American. Few immigrants from Ireland during his generation have led a more eventful life than "Boss" Croker of New York.

* * * *

AN occasional blow-out or bit of engine trouble does not discourage the veteran automobile tourist. It may cause a little fussing and fuming among those in the back seat—the guests—but the driver simply takes off his coat and goes right after the trouble with wrench and hammer, knowing that he will soon be on his way again.

There are people who fuss and fume about public affairs, delighting in their scepticisms, while really enjoying good health and good times. They are usually those who know least about the real situation and base their conversation upon rumors and chatter that is far from fact. It is high time for people to be more accurate in their talk, and not base conclusions entirely on an occasional glance at a newspaper heading.

As T. P. O'Connor told me on the terrace of the Parliamentary House at Westminster: "Americans are the greatest half-educated people in the world." When they do set themselves to a task, they quickly and intuitively educate themselves, however, and when information reaches a real conviction, they go ahead and do things.

Conclusions at Washington are often criticized, but later people understand that those at the Capital have real information that determines conclusions.

When Secretary Hughes refused to join the Genoa Conference and declined the invitation of The Hague, it was because he recognized that it was only a change of location and not a change of purpose.

* * * *

WITH only a two-line biography in the Congressional directory, Senator Porter James McCumber of North Dakota, Chairman of the Finance Committee of the Senate, is filling many lines in the record of the Senate. As successor of the late Senator Boise Penrose, and in charge of the tariff bill, Senator McCumber is doing Herculean work these days.

Born in an Illinois prairie town, with the classic name of Crete, Porter McCumber has had a rather remarkable career. He started with a public school education, and in 1880 graduated from the University of Michigan. Early in the days of Dakota territory he immigrated to Wahpeton. The date is 1881, and he has been a citizen of Wahpeton ever since, living there even in the days when North and South Dakota were one large territory. It is something to have lived in North Dakota since the days when the winds whistled over the bare, broad waste of



HON. PORTER JAMES McCUMBER

Senator from North Dakota, chairman of the Senate Finance Committee. A staunch disciple of conservatism, who has faithfully and conscientiously served as a national legislator for three decades

prairie land, dotted by buffalo wallows. Today the same territory is checkered with many fine farm houses.

Senator McCumber was a member of the Wahpeton House of Representatives from 1885 to 1889, and States Attorney in Richland County up to 1897. He was elected to the United States Senate in 1899 and is now completing his fourth term.

He has a ringing, clear, resonant voice—perhaps one of the most pleasant that is heard in the Senate Chamber. He reads his notes on the table perfectly without glasses, and is very lucid and clear in his debate. It is not necessary to say that his antecedents were Scotch. He has a firmness in his convictions and a tenacity that reflects the characteristics of that race who lived in the early days amid the glories of Scotch heather. He is a blond and has many times been taken for a Scandinavian, but when his clear, bright blue eyes flash in debate you see the strong traces of Scotch temperament.

For thirty years he has given undivided and conscientious study to his work as a national legislator, and has more than fulfilled the enthusiastic predictions of his supporters. There is not a detail on the massive tariff question—as large as a small encyclopedia and containing figures and facts that would put an ordinary head in a whirl—that he does not understand.

He drives straight at the point. He insisted in one of his opening addresses that it would not be necessary to add additional tariff taxation to provide for the bonus. He has been a member of the farmers' bloc and has always leaned to staunch conservatism. There are no long stretches of wasted moments to account for in the career of Senator Porter James McCumber.

THE flood of good American money that has been expended in travel through Europe in the last year has almost equalled the high-water mark of pre-war times, and it is now suggested that a tax be paid by those who are able to enjoy this luxury at this time.

One thing that has aggravated the spirit of the good old-fashioned American is to see the United States Shipping Board



HON. HENRY F. LIPPITT

Former Senator from Rhode Island, and prominent in cotton manufacturing and banking circles in his state

encouraging people, through an advertising campaign, to spend their money traveling in Europe even before seeing their own country. The object, of course, is to get them to travel on American lines, if they must go to Europe, but it is felt that the Shipping Board has spent a great deal of money in building up a business not only for themselves, but for other transatlantic lines, and a good, healthy per capita tax on "travel abroad" would soon fill some treasury vacuum yawning for revenue.

The story and history of the United States Shipping Board cannot be pronounced a glorious success. It was not an attractive position which was offered Mr. Albert D. Lasker, and he has done good work. There is a feeling that the American Merchant Marine and the shipping problem must command the best business genius of Congress and the co-operation of the people. Whether that means we must encourage more travel abroad, more spending of money and time needed in the industrial development of America, is yet to be answered.

The net result obtained by people traveling abroad is scarcely commensurate with the drain of fifty to one hundred millions a year on the public purse. It does not make the average over-

seas doughboy feel very good to see himself denied a bonus by people croaking about taxation, and yet spending their money like lords and Russian grand dukes in trips abroad for their own pleasure and to look upon the battlefields where they suffered privation, faced death and left many of their buddies to sleep in their blankets.

There is a general feeling among most of those who went overseas against spending time and money to go back now to revive the gruesome memories of so long ago, when there is so much yet to do here in caring for the wounded heroes and those who participated in the supreme test of American citizenship.

* * *

HE kept us out of war," and thus Wilson made 1916 a Democratic year. Many a stalwart Republican statesman then "took the count," to the country's loss in some cases. Among the latter was that of Senator Henry F. Lippitt of Rhode Island. In going down, though, he made the "enemy" know he had been in a fight. Mr. Peter G. Gerry, Democrat, had a plurality of only 7,837 over Mr. Lippitt in a total vote of 88,877 cast for five party tickets.

Mr. Lippitt is a business man rather than a politician, hence the occasion for regret that he should have served but one term in the United States Senate. Men of his calibre and tested practical ability are needed in Washington when tariff and taxes are going through the legislative mill. He was born in Providence on October 12, 1856, and, following an academic education, entered Brown University, where he graduated as bachelor of arts in 1878.

Immediately after graduation Mr. Lippitt went into the cotton manufacturing business. His education had not put him above honest toil, so he began at the bottom as a day operative. From that his ascent was steady until he became a general manager. This is the kind of experience which makes a thorough man, one who cannot be fooled by excuses for inefficiency in any department of his business.

Mr. Lippitt, before his election to the Senate in 1911, had attained to a directorship in the Mechanics National Bank of Providence, as well as in several mill mutual insurance companies, and the vice-presidency of the People's Savings Bank of Providence.

* * *

THE primaries in Indiana indicate that Albert J. Beveridge is coming back with a bang. In the years that have elapsed since his retirement from the Senate, he has won literary distinction equalled by few members of the Senate. His "Life of John Marshall" has already become a standard work.

As a campaigner, Albert Beveridge has few equals, and in the few years he was absent from the Hoosier State, pursuing his literary work, he was not forgotten. Albert J. Beveridge has always thrived upon red-hot fights.

Now he has before him a contest for election which promises to be another hand-to-hand Senatorial contest, and Indiana is coming back as the battleground of strategic political manoeuvres that influence the moves on the national political chess-board. At the age of sixty Senator Beveridge feels that he is prime to crown his busy life with an addition to his illustrious record in the United States Senate.



ALBERT J. BEVERIDGE

Former Senator from Indiana, now engaged in a contest for election again to the Senate from which he resigned a number of years ago to engage in literature

EASTERN talent leavens western life with good results. The reverse holds true in increasing degree. Some of the strong leaders in the eastern half of the United States, like young Lochinvar, "came out of the West." In the national halls of legislation eastern-born men represent western states and western-born men eastern states. It is a fair exchange and makes an amalgam for national solidarity, a happy blend of sympathies which is unfavorable to the sinister growth of sectionalism. Every state having them is proud of its native sons who represent it in Washington, but not more than any state is of its adopted sons who have won similar distinction.

Jamestown, New York, and the state of Wyoming is saddened by the news that Mr. Frank G. Curtis has passed to the Great Beyond. He was a young man of more than ordinary energy, who had done well in the western oil fields. He was regarded as one who usually gets what he goes after because he goes hard. Having made strong friendships in national politics, his enthusiastic loyalty to Theodore Roosevelt and his ideals marked him as a leader in early manhood. A close friend of Senator Lenroot of Wisconsin and other leaders in Congress, it was natural that his friends insisted that he take a part in what he had so valiantly fought for in helping others to accomplish. When his snapping black eyes and smiling face confronted an audience or any group of his fellow-men, there was a conviction that something worth while was to be achieved.

* * * *

HOW empty a mere biographical skeleton of a famous man seems when it is framed in the paragraphs of "Who's Who." It barely reflects the life spirit of the man.

In June, 1867, there was born in Troy, Pennsylvania, a lad who was christened Henry Pomeroy Davison. He was a quiet lad, and a thoughtful boy. There was a wrinkle in his brow that indicated an inquisitive nature, and a sparkle of kindness in his eye that was further indicated by the kind way in which he treated his pets.

His academic education was at South Williamstown, Massachusetts. Early in life he determined to be a banker—a banker in the broadest sense of the word. He wanted to understand the basis of the resources that made such things as banks. He began his banking career in New York, where he became a teller in the Astor Place National Bank in 1891. He had made a thorough survey of New York for a job. He considered himself lucky indeed that he had found one in a bank. As teller he tried to learn something from every one who came to the window. He studied the pictures of human nature framed before him. He worked early and late. He was there before banking hours, too, for he was not aspiring to banking hours, but to being a real banker.

In 1894 he became assistant cashier, one year after his marriage to Miss Kate Trubee, of Bridgeport, Connecticut. Then he became vice-president in 1898 and soon accepted the presidency of the Liberty National Bank. Everywhere he went he seemed to attract attention as a poised, kindly, straight-thinking, quick-acting executive.

In 1902, after he had become vice-president of the First National Bank of New York, he came in close touch with J. P. Morgan, and that determined his great future. All that was necessary for Henry P. Davison was an opportunity—and many times he made the opportunity for himself.

He became director and chairman of many corporations. He seemed to understand their intricacies, and business judgment came to be as natural to him as breathing. But even in those busy days he did not forget his civic responsibilities.

After an arduous afternoon he would often talk of things far from the field of business. He was especially interested in social science and natural history. When war was declared, Henry P. Davison proved his master genius. The organization of the Red Cross was a staggering proposition. A paltry sum was wanted, but the gigantic mind of Henry Davison saw further, and he raised millions instead of thousands.

Night after night and day after day he gave himself unre-servedly to the call of mercy. He cut loose from all business responsibility, and put all the power of his executive genius into one thought—the Red Cross. Abroad, Henry P. Davison was a hero in the eyes of the orphan children. One Sunday in Lyon, France, the children in the park greeted him with flowers and placed a garland on his brow as "Knight of the Red Cross." It touched his heart and made him more staunch than ever in his efforts to aid them.

In all the relations with foreign powers he proved a master diplomat. He made the Red Cross the greatest mother of them all, and revealed the red-blooded and warm-hearted nature of his ideals. The work of the Red Cross saved Italy from being another Russia. No questions were asked when women and children asked for bread.

Henry P. Davison, in his work overseas, carried a responsibility and organized an army as great as the commanders in the field. In fact, the boys at the front always remembered that the banners of the Red Cross glowed behind them as they advanced towards the front, with one purpose—to win the war.

When the distress call came from Halifax and from other parts of the world, Henry P. Davison, with his universal mind, seemed to grasp every situation instantly, moved by a single impulse—to serve mankind.

It was the arduous work "over there" that cost him his life. When he returned to America he became chairman of the International Red Cross, and the complications growing out of peace negotiations never phased him. He utilized even the moments in an automobile to write conference messages. During the busy days in the office at Morgan's, when he submitted to massage and took exercises with the hope of conserving his strength and powers so he might finish the work, he often said, "I am hoping for the strength and power to go on."

When the records of the war are written, the name of Henry P. Davison will be among those who made the supreme sacrifice. He could have had a life of ease and comfort, but his life was dedicated to service. His heart was in the cause, and the records and achievements of the Red Cross will ever be illuminated by the leadership of Henry P. Davison, Crusader.

He was a quiet and considerate man. The door of his heart was always open, and in the last days, during physical torture, he maintained a philosophic poise to the end. When entering his home for the operation there were no good-byes. He played for a while with his grandson. With that same poised purpose which inspired his work overseas, Henry P. Davison kept fighting to the last, with his heart and soul radiant with the purposes that had inspired his life. Henry P. Davison was an American to the core and an inspiration of what a young man can achieve whose deals and purposes are concentrated, focused on the opportunities as they come.



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THE LATE HENRY P. DAVISON

A great banker, a great executive, and a great friend to mankind. The memory of the leader of the Red Cross will long be cherished in the hearts of grateful people, not in America alone, but in many lands across the seas

"An honest man's word is as good as his bond"

From the Round-up to the Senate Chamber

The same unspectacular personal qualities of honesty and integrity that made the young cow-puncher so admired and respected characterize the Hon. John B. Kendrick's senatorial record

THERE is something of the sturdiness of pioneer folk in the personality of Senator John Kendrick of Wyoming. For eighteen years he never left the State, for he loved his home in the West. He has traveled the West on horseback from the Gulf to the Canadian Northwest, and has followed the buffalo, which is now almost extinct. He has lived among and with the Indians, and understands their nature—even their humor and their characteristics. He has the same big, broad-hearted, sympathetic appreciation of the red men as of his fellow white men. During the lonely days on the ranch he read much of Nature and of men in books and came to Washington a type of a well-rounded, self-educated man. On the walls of his office in the Senate Office Building are pictures of the old "round-ups," suggestions of the earlier and later days in the old and in the new West. He is proud of the "Yellowstone State."

* * *

About forty-five years ago, a slim, self-tutored cowboy got a job in Texas at thirty dollars a month with a cattle outfit that was moving to Wyoming. There was nothing then to mark him out from scores of similar lads who, with high hearts set out upon the Texas Trail—that is, nothing that was visible to the naked eye. But this youth had vision. Added to that he had courage. And added to that he had warm human sympathy. He understood his fellow men. He knew what he wanted to do, and because he had the strength to do it, that Texas stripling has grown into one of the most steadfast, sanely progressive statesmen now in national life—Hon. John B. Kendrick, United States Senator from Wyoming. The thing that distinguishes Kendrick from many of the men who walk out upon the political stage at Washington is that he is concerned chiefly with results, and not with the impression he is making while he is getting the results; and so it is that instead of trying to follow the spotlight in the Senate Chamber, Kendrick devotes his days to the solid, unspectacular methods that produce results.

This characteristic of the Wyoming Senator seems to have been an inherent trait. Some of his old time friends of the range days tell how the outfit for which he was then working as foreman in Wyoming was sold out—lock, stock and barrel—and how at the very moment that he was thus deprived of his employment, the Wyoming Stockgrowers' Association had adopted a rule that cowboys who had cattle of their own on the range could no longer be employed either as ranch hands or as foremen by members of the Association. Kendrick had just laid the foundation of what is now one of the best herds in the West, and his few animals were scattered over a stretch of country one hundred miles square. With this problem confronting him, no job, and a rule that said in effect, "If you must work for wages, sell your cattle; if you don't sell your cattle, move on," the young cowboy was offered the post of inspector by a cattle association at a salary of one hundred and fifty dollars per month—a king's ransom in those days. But Kendrick had had his vision, he knew what he wanted to

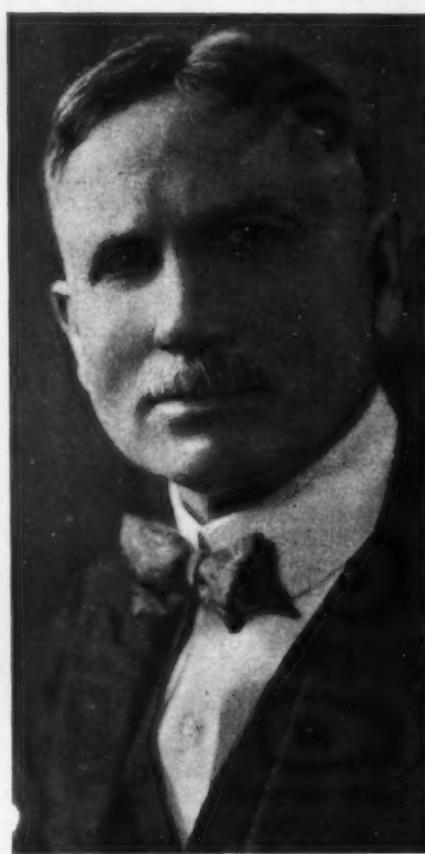
do, he wanted to be a big owner himself, and he knew that to accept the high salaried place would mean the sacrifice of that upon which he had set his heart. He refused the inspectorship. "I am not going in that direction." Instead he took a job at forty dollars a month from an

outfit, the head of which said to him, "That rule of the Stockmen's Association was not meant for you." His reputation for sterling integrity had already been made, and he got his chance.

The same qualities, however, that made the young cow-puncher stick to the program he had mapped out for himself, the same courage that refused to be diverted in spite of obstacles—these are the qualities that sustain him today in his legislative career. It is not a far cry from the youth of long-vision who conceived the determination to build up a herd of thoroughbreds and who did build it up, though he started with nothing but his character, to the political leader who secured the enactment of the packer control legislation. That measure, fought to the bitter end by all the power, skill and ability that the big packing companies of the country could marshal, is one of the achievements of the cowboy senator. He started the campaign as a member of the market committee of the American National Livestock Association long before he came to the Senate. He was chiefly responsible for the authorization of the investigation of the meat packers by the Federal Trade Commission. He introduced the first bill providing for packer control in 1919. Many changes were afterwards suggested and the bill was driven through a tortuous course, but when it was finally enacted into law by the signature of President Harding, it was, on the testimony of Thomas W. Wilson, the Napoleon of the packers, to all intents and purposes the original Kendrick bill.

That was a big reform, but the feature of the fight most characteristic of Kendrick was that at no time throughout the long struggle did he evince the slightest animosity or personal hostility toward the leaders of the industry he was seeking to bring under Federal supervision. "All we want," he said, "is a guaranty of fair play, and we don't care how much money you make legitimately. I want the man who ships a single carload of livestock to market to know that when his stock is sold, he is getting the honest market price. In a fair field, without favor, the producer, large or small, will take care of himself." And there you have one of the fundamentals of Kendrick's character, one of the things which have helped to carry him onward, one of the things which in politics has made him, though a Democrat, always strong with the Republicans. He fights for principles and not against men. Everyone who knows Kendrick knows that he is sincere and that in a matter of principle, in a matter of service to the Nation or the State, he knows no party lines. He wars not on men, but on methods.

And that brings us square up to the "farm bloc." There are many men of many minds with respect to the "farm bloc." Some praise it, some condemn it, but all admit that it was responsible for most of the constructive legislation enacted by the present Congress. The nucleus of the farm bloc was formed when Kendrick first interested Senator Kenyon in the packer legislation, and it was the organization that they formed to push this bill through that became the instrument of legislation after the Republicans gained control of the national government. It was non-partisan. (Continued on page 14)



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SENATOR JOHN B. KENDRICK, of Wyoming, is a pioneer cattleman who in his cowboy days rode hundreds of weary miles in the choking dust of the trail herd and headed many a wild stampede from the bedding ground in the middle of a pitch-black night in the pouring rain.

The days of the Chisholm Trail are cherished only in the memories of men who have long ceased to participate in the activities of the range. Much of the romance of the open range took flight when barbed wire was invented to enclose the luxuriant pastures of the valleys and convert them into smiling meadows and later to reach out across the gray rangeland to enclose the lands of the settlers.

With the passing of the open range the old order became a memory to be cherished for the fine sympathies and generous impulses which thrived in its atmosphere. Of the men who came under the influence of those days there remain only a handful—just a few of a breed of men such as the world had never seen before the days of the great herds of the West—such as it will never see again, and Senator John B. Kendrick of Wyoming is one of these elect.

"Knowing I lov'd my books, he furnish'd me"

Governor Glynn of the Empire State

Lives in a world of books, and is a scholar and statesman of distinction. Has greatly helped the cause of Ireland

IN the spacious private library of Governor Martin H. Glynn at Albany, books seem to be men. The guests amid the galleries and upon the stairway seem to mingle as visitors with the authors of all ages.

Martin Glynn loves his books as he loves people. He seems to browse and chat with them as he catches the real philosophy from the life expressions of mankind, whether corporeal or not. It seems as if I am attending a literary salon when I drop in for an evening with Governor Glynn at Albany or at his summer home near that of David B. Hill, author of the famous saying: "I am a Democrat."

Martin Glynn has made an impress upon events, national and international, during the past decade. It is something of a distinction to have been governor of New York, but he is more than that—he is an editor-statesman.

Martin H. Glynn was born in the town of Kinderhook (New York) in September, 1871—just a mile away from where Martin Van Buren was born, and twenty miles from the spot where Samuel J. Tilden first saw the light of day. In this environment it would seem that Martin Glynn came naturally by his democracy. He was educated at the public schools and then at Fordham University, New York, where he was the honor man of the class. He received the LL.D. degree from six universities. He studied law and was admitted to the bar, but the call of the editorial sanctum was too strong and he became editor and owner of *The Times-Union*, which has been a journalistic power in the empire state.

In 1898 Mr. Glynn was elected to Congress and appointed a member of the National Commission of Louisiana Purchase Exposition by President McKinley. Martin Glynn is, first of all, a broad-viewed man; a student and a scholar, with a great, warm, sympathetic heart. In 1906 he was elected Comptroller of New York, at a time when that position was one of supreme power. In 1912 he was elected Lieutenant-Governor, and became Governor in 1913. As governor he passed the famous workingman's compensation law, and he knew how to work for constructive legislation, even with political rivals.

First of all he commanded the respect and confidence of every one who knew him. He was one of the trusted friends of Theodore Roosevelt and Charles Evans Hughes, the Republican governors of the state. It was Martin Glynn who virtually re-wrote the banking laws of New York and organized the department of farms and markets, and reduced the New York state tax twenty-five per cent.

As temporary chairman of the Democratic National Convention in St. Louis in 1916, he first attracted world-wide attention. It was his speech at that convention that elected Woodrow Wilson. As a speaker he has few equals, and in every address he says something worth while. And no wonder, for when one spends an hour with him in his library at Albany one finds there a student and philosopher. He loves literature and the study of mankind, not only from the objective viewpoint, but from a survey of the activities of mankind.

In 1919 Mr. Glynn was named by President Wilson a member of the Industrial Commission,



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MARTIN H. GLYNN is a notable example of the successful blending of legal lore and journalistic acumen. He has been markedly prominent in the public life of his native State, New York, attaining to high political honors and demonstrating a remarkable capacity for constructive legislation. As temporary chairman of the Democratic National Convention in St. Louis in 1916, he made the speech that elected Woodrow Wilson president. The Free State of Ireland is largely a result due to Martin H. Glynn's diplomatic handling of details while engaged with a mission to London in connection with the settlement of the Irish question

and in this work, as in his previous constructive legislative acts, he evidenced his constructive genius. The climax of his career was reached in his work for Ireland, the land of his forebears.

It was the mission of Governor Martin H. Glynn, who went to London and first discussed the settlement of the Irish question. He conferred with Lloyd George and extended to him the invitation to De Valera to come to London "without conditions and without promises" and discuss the Irish question. The Free State of Ireland today is a result due largely to the diplomatic and masterly handling of details by Mr. Glynn. He started the work in Rome when he met Bishop Maddix of Australia and worked with Archbishop Hayes of New York. In this first conference was the beginning of a realization of the dreams of Ireland.

As an editor, Mr. Glynn drew from Lloyd George the fact that it was the one great ambi-

tion of his life to settle the Irish question with the same pen with which he signed the armistice. Mr. Glynn conveyed to Premier Lloyd George the sentiment of the United States favorable to the cause of Ireland. He is a great admirer of Lloyd George as an orator and debator. When he first saw Lloyd George the English Premier was reclining in a dentist's chair. Mr. Glynn's description of these epoch-making days is a fascinating glimpse of contemporaneous history.

But there was another event that revealed the real Martin H. Glynn. In January, 1922, in his address at the gathering of the "Amen Corner" he paid a tribute to Edward Page Mitchell, the famous editorial writer of the *New York Sun* for over fifty years. Mr. Glynn paid a tribute to his fellow craftsman that is not surpassed in the annals of journalistic history. Here he was at his best among kindred minds, and every sentence that he spoke flashed the enthusiasm of a crusader—for if there ever was an earnest man through and through and sincere to the core his name is Martin Glynn. He speaks and writes fearlessly and unafraid, but all his work is suffused with the kindness of a warm heart. He is still in the early years of his life achievements, and has taken his place as a leader of national importance, who never forgets that above all he is an American, a true exemplar of the ideals of the republic.

Even in the environment of his summer home, Martin Glynn longs for his books. One day he telephoned Mrs. Glynn to be sure and bring the package of books that had just been received from Boston.

Mrs. Glynn, like the good wife and helpmate that she is, carried a package of twenty-five books all the way out to their summer home, feeling that she had brought some new treasure for her husband's delight. He greeted her affectionately because she had reached his heart through her kindness and thoughtfulness in bringing the books. She had neglected the bread, butter, cheese and other things that might be necessary for mere living, but she had, bless her heart, brought the books.

He opened them with all the anticipation of a Christmas present. Lo, and behold, when the covers were taken off there were twenty-five copies of "Heart Throbs" that Mrs. Glynn had seen in every nook and corner at home. Even in her husband's suit case when he was traveling.

"Why did you have me bring all these books when you have so many copies of 'Heart Throbs'?" she asked.

"My dear," he replied, "these are for friends that I want to have 'Heart Throbs' right away. I have given away my last copy. Now we can make twenty-five more friends happy."

As a giver of books one has a glimpse of the intellectual character and warm sympathetic nature of Martin Glynn. As he said:

"I don't give away 'Heart Throbs' because they are published by Joe Chapple, but because they represent the heart glow of fifty-two thousand people, and I am glad that I am to be numbered among that throng who have given to literature, through this book, a priceless and matchless collection that will endure long after their editor may be forgotten. My own favorite poems and bit of prose are found there."

"Full of wise saws and modern instances"

Coleman Cox's Business Philosophy

"Take it from Me" a modest booklet overflowing with worldly wisdom, apt expressions, and quaint conceits

By MAITLAND LEROY OSBORNE

LESS than a year ago Coleman Cox of San Francisco was unknown outside his own little circle of business and social associates. Today his name is known to hundreds of thousands of people all over this broad country—people who have read and profited by the reading of the gems of homely wisdom he has dug from the mine of observation and printed in a little booklet entitled, "Take it from Me."

Mr. Cox is a living and shining example of the virtue of persistent saving. Only, instead of saving money, he has been saving over a period of years what is of infinitely greater value than money—ideas.

For thirty years or more he has carried about with him a memorandum book in which to make a record of the ideas deposited in his brain day by day. Everyone of us who is at all receptive absorbs ideas which we set away on the shelves of our brains, just as a prudent housewife sets away jars of preserves on the shelves of her dark closet. The human brain is simply a storehouse for ideas. The scientists can even tell us how many ideas the average normal brain is capable of assimilating. Once carefully put away in one of the half billion tiny brain cells that correspond to the shelves of the housewife's dark closet, the idea is preserved there as long as life endures—but as the door of our consciousness is opened from time to time and new ideas are set away upon the shelves, the storage space with which Nature has endowed us becomes crowded, and the old ideas that we set carefully away upon the shelves yesterday, last week, last month, or last year, are shoved into the background by the newcomers till, groping about in the dark corners of our brain storehouse some day for an idea we wish to use, it eludes our search.

We say then that we have forgotten. We have not forgotten. The idea or thought or impression—call it what you will—that we put away is there. Only we cannot find it. If we train ourselves to put away ideas in systematic order, to card index them as it were upon the tablets of our memory, we can more readily put our hands upon them when we wish to use them. If we set them away in the corners carelessly, as we throw old shoes into a hall closet, when we want to use them we must grope painfully and uncertainly about in our storehouse till we find what we are looking for—or fail to find it.

Then we exclaim brightly, "Ah! now I remember!" or declare dejectedly, "Well, that's funny—I've completely forgotten."

While Coleman Cox was still young enough to make saving worth while, he felt the urge to save. Only, as we said before, instead of saving money, he saved ideas. And in order to be sure that he would not some day put away a perfectly good idea that he might want to use sometime without being able to find it, he made a permanent record of them—and as the years passed on his store of ideas grew and multiplied and compounded with accrued interest from year to year, till there came a time when the principal had assumed such magnificent proportion that the interest alone upon it amounts now in a single day to as much money as many hundreds of thousands of men are able to earn in a month of hard and exacting toil.

How all this came about makes not only an



COLEMAN COX is a striking example of the virtues of saving—only, instead of saving money, he has saved ideas. "Take it from Me" is the title of a little booklet containing his ideas in the form of business epigrams, the publication of which has made him famous almost over night

interesting story, but calls attention once again to that old saying, "Truth is stranger than fiction."

Coleman Cox was born fifty-one years ago in a little country town in old Kentucky—than which state, we apprehend, there is no better place on God's green footstool to be born in, suh! He had some schooling—not much, to be sure, but enough to set his active mind to working along highly original lines. At an early age he went to work—not, as he naively confesses, because he had to, but because he wanted to. While he was still quite a young man he got printing ink on his fingers, and, like most men similarly marked, has never since been able to get it off.

At the age of twenty he left the little home town, determined to "make good" on some "big town" newspaper, which in due time he did, and has worked since on many of the best. Deciding, some years ago, that he wanted a newspaper of his own, he set about its acquisition, and owned

three before coming to the conclusion that while there may be many harder ways of making money than running a newspaper, there are few easier ways of losing it.

From the newspaper game to the advertising field is just a step, which he took, and found it profitable, interesting and worth while. Today he is district manager in California for the Pacific Railways Advertising Company, and looks back over a sometimes hectic, sometimes discouraging, sometimes successful thirty years of business life—and forward into a future which he hopes to turn to the good of others.

He has had, as the saying goes, his "ups and downs." He has climbed to the heights—he has stumbled in the depths, and has acquired withal a philosophy of life that enables him at middle age to say, "This is, after all, a mighty good sort of world to live in."

Something like a year ago he was invited to give a talk before a meeting of sales managers. The choice of a subject being left to his own selection, he picked out a few score of the ideas he had been saving for so many years, condensed them into short, colloquial sentences that fairly scintillated with keen and pungent truths, and—somewhat to his own surprise—made a tremendous hit with his listeners. Indeed, so unique and striking were the snappy little tabloids of wisdom that he distributed that insistent demands were made for more.

To meet this demand he put two hundred and fifty paragraphs of his observations into booklet form—each paragraph complete in itself, and each one expressing a concrete idea in such simple and direct form that the reader cannot fail to grasp its application.

A whole library of helpful hints on business deportment is condensed into this little booklet of forty pages. The seeker after information does not have to search through a wilderness of words for a concealed idea—a dozen of them are staring at him from every page, so plainly expressed that he who runs may read.

Like Alfred Harmsworth's experiment in tabloid journalism with the *New York World*, a matter of twenty-five years ago—like Omar the Tentmaker's finely polished gems of Persian poetry—like Gracian's "Art of Worldly Wisdom," the sparkling truths he offers to the world shine, not like candles through a fog, but like bright stars from a cloudless sky.

Which is the reason why it has been necessary to print two hundred thousand of the books in less than eight months to meet the incessant demand for "More—give us more."

"Take it from Me," Coleman Cox's contribution to the business literature of the world, has never been advertised—it is not a newsstand or book store product, but a pamphlet that employers buy by the hundred or thousand copies for distribution among their employees. Moreover, it was not Mr. Cox's first intention to put the book on sale. When he had the first edition printed his only thought was that it might be helpful to other strugglers in the business world. He had no expectation of making money from it.

Being a good Rotarian, Mr. Cox believes that a man can only reach the top by pushing the other fellow up ahead of him. He has given away thousands of copies of (Continued on page 16)

The Conquering Army

By KATRINA TRASK

Author of "In the Vanguard"

A MIGHTY Host, implacable as Fate,
Has marched, unceasing, through the
centuries,
Across the myriad passes of the earth.
Men of all countries and of every clime
Have swelled the countless number of the Host.
Their garments, crimson-dyed, drip human blood:
Their eyes are grim as graves: their rough-shod
feet
Trample fair women and frail new-born babes:
Their hands, blood-stained, are quick to seize, to
rend,
To ravage, to destroy.

O'er the green earth,
Where they have passed, a withering blight
remains;
Red ruin, desolation, and the dead
Heaped high as Heaven, a ghastly spectacle.
The little children, terror-stricken, run
To fondle fathers dead upon the field,
Or croon to outraged mothers, dead at home.
Defenseless maidens die, defiled by men:
And all things beautiful are desecrate.

For numberless dark ages, marched the Host—
And as they marched, they sang:

Lo! We are the Army of Death;
We care not for Mercy—for Right:
Hot fury and flame is our breath:
We battle for Conquest and Might.

We go forth to slay and be slain:
No mortal can stand where we pass:
With dead we have powdered the plain,
With blood we have poisoned the grass.

Lo! We are the Army of Death,
The merciless Army of Death,
The conquering Army of Death.

Yet, ever, in the record of the years,
The conquest won, in turn, was swept away
By later conquests of the conquering Host.
Since time began, the devastating horde
Has left no permanent, no living mark;
Has no endurance found in victory;
Nothing but irremediable woe,
And bitter seeds for future harvesting—
Hot hatred, and fresh greed for after-strife.
Each hard-won truce was but a passing pause,
Each conquest but a transitory gain
In the long warfare of the waiting world.

Strong Babylon and stately Nineveh
In triumph rose to glory and renown,
Flourished a fleeting day of royal fame,
To be, once more, low-levelled to the dust
By later deeds of conquest and of doom:
Great Persia, matchless Greece, majestic Rome,
Each rose in pride, then prostrate fell again
Before the trampling of the ceaseless Host.
The towering Teutons, the remorseless Turks,
The dauntless Anglo-Saxons and the Celts,
The valiant Franks, the Latins and the Slavs,
Have each, in turn, been drenched in blood of
kin.

After long centuries of savage reign,
The ruthless, devastating horde became
The finely-finished flower of Christendom—
Baptized as Christians, civilized as men:
To-day, a purpose consecrate they hold—
To guard high honor, and to serve mankind:
The glory of aggression they disclaim—
Vaunting ambition, selfishness, and greed:
In splendid armed peace they now await
The call of Duty—the appeal for help,
Then bravely march, with fine-intentioned zeal.
Yet still they are the mighty Host of Death,
Who consecrate themselves to butchery
With lofty purpose and supreme intent:
They kill for honor, and for justice slay:
And as they march they sing:

Lo! We are the Army of Death:
Great wrongs at our coming shall cease:
God breathes in our spirit His breath:
We battle for Mercy and Peace.

We go forth to slay and be slain:
For Duty and Justice we fight.
We care not for gold nor for gain,
We battle alone for the Right.

Lo! We are the Army of Death,
The civilized Army of Death,
The Christianized Army of Death.

And still they slaughter—as they go to serve,
Equipped with frightful engines, swift to kill:
The mutilated men by millions fall
In trenches red with horror, piled with dead:
Still, as of old, the orphaned children cry,
In blackened towns laid waste and desolate,
And maidens, forced to bitter motherhood,
Are left to curse the day that they were born.
Men are insane with slaughter, drunk with blood,
The toxic curse of war: there is no way
Of killing they forget, no fiendish mode
Of torture they forego: a shrieking Hell
Is found where'er they fight.

Before they march
The Army, in God's holy name, is blessed,
And over implements of war is made,
And on rewards for bravery is wrought
The awful and historic cross of Christ
Who died to teach men Love for all mankind.

The patient God, the while, looks down from
Heaven
And laughs with humor infinite, divine.

He knows old ways will bring but old results.
To punish like with like, makes like again:
The thistle from the thistle seed must spring:
Swords are the destined harvest of the sword.

But see! Behold! from the awakened East—
Where shines the splendor of the morning star,

Where spreads the effulgence of the coming Dawn,
Which heralds the glad birth of a new Day—
A valiant company is moving on,
An Army quiet, unregarded, small,
Devoid of flaming arms and armaments,
But terrible with Banners: strong in soul:
Brave men and women with their hearts aflame
To dare, to do, to help and to endure.
Their wind-swept garments smell of fragrant
flowers

And spicy odors of the woodland pine—
No stench of blood is flaunted from the folds.

With perfect poise this Army marches on,
Unheeding cruel taunts and mocking sneers,
More sharp than bullets to the conscious heart:
When jeering men "white-livered cowards" hiss,
High courage is the conquest they attain—
To stay the hand and smile in steadfast strength.
Their eyes are glowing with an inward light,
As though they looked upon the great Unseen:
Their hands are quick to bind, to soothe, to bless.

How beautiful their onward pathway shines!
The yellow corn springs high, the golden grain
Waves promise on a thousand fruitful hills:
Great cities rise, enduring works increase;
Glad homes are crowned with comfort and with
care.

And brooding science finds new secrets out.
The glory of accomplishment is theirs,
The mission of the mighty enterprise—
To conquer nature and to master art.
The secret of eternal harmony—
The reconciliation of the world.

The Army's ranks grow larger, year by year—
Its dauntless power invincible becomes:
Naught turns nor swerves it from its onward
course—

No persecuting jest, no argument,
No noisy talk of Honor—every man
And every woman in the Army knows
That Honor is a holy thing, too dear
To leave to the arbitrament of arms,
To fatal hazard of chance shot and shell.
And as they march they sing:

Lo! We are the Army of Life!
We are clothed with the strength of the Sun,
We are marching to conquer strife,
We carry nor sabre nor gun.

Bright blossoms immortal shall spring
In the way that our feet have trod:
A guerdon of giving we bring—
Good-will unto all men from God.

Lo! We are the Army of Life,
The terrible Army of Life,
The conquering Army of Life.

By Nature's laws made manifest to man,
All Death is but Negation—dark decay:
Life is the vital spark that brings forth life:
Death shall be swallowed up in Victory.

All Hail, O Conquering Army of the Dawn!





An interview with one of our foremost engineers

By ALBERT T. REID

AN Admiral in our Navy, in an interesting recital of the problems with which they are confronted, told me that the matter of vibration is one which gives them serious concern. Through him I again heard the name of N. W. Akimoff. He referred to Mr. Akimoff as one of the present day engineering geniuses to whom the government frequently turned for the solution of perplexing problems.

Sometime later I saw a crank shaft for a well-known automobile being tested on a singularly interesting machine which minutely detected any lack of balance, located the point at which it would have to be true and indicated the amount of this compensation. The machine was a product of this great engineering mind.

In Philadelphia, a few weeks ago, I called on Mr. Akimoff in his office near the Broad Street Station. Here, surrounded by highly trained specialists, I found him delving into the mysteries of scientific research and giving particular attention to the subject of vibration.

He is keenly interested and interesting. He is a fine business executive, mild mannered and modest, engrossed in the solution of perplexing vibrations, from those in the big vessels in our Navy to the smallest pieces of stationary machinery—from the throbbing which shakes buildings to the buzz of an electric fan. Here he is engaged in compensating an aeroplane propeller, or again in a lack of balance in the shaft of an automobile which must be overcome, or a giant steam turbine which must be balanced.

Our conversation turned to the subject of scientific research, to which he has devoted his life, and he dwelt at length upon the poverty of this country in this great field. His great regret in life is in so far being unable to awaken in large institutions, or in those who could carry on this great work, the necessary interest to do it. But that lack of success has only whetted his determination that it shall yet be done. That is an index of Mr. Akimoff's character.

He describes research work as divided into two vastly different fields of activity. The first, where the man works in a certain field,—say chemistry or electricity—without knowing what he is after. He just tries new combinations until he stumbles upon something new and unexpected. This new result in itself is often of no value, and it takes a great deal of time and brain

work, often on the part of a radically different man, to adapt it to practical use.

The second, where a man has a definite, difficult problem confronting him,—and has at his disposal only paper, pencil and years of systematic training. Any ordinary problem of arithmetic or algebra can be considered an elementary example of this sort of research. Certain facts are given. The problem is to reduce them to terms of a certain language—say that of equations—then to find the solution in accordance with certain elementary notions firmly implanted in his mind. Archimedes, of "Plutarch's Lives" (Marcellus) Mr. Akimoff pointed out, evidently belongs to this second class, while Newton is a brilliant mixture of the two.

"I feel," said Mr. Akimoff, "for the first class of research we ought to have more laboratories and facilities. For the second class we need more suitable men. It would probably surprise one if I said there is no systematic course of research work in any of our colleges. For years I have been trying to induce some reputable college to inaugurate a systematic two-year course of general research work, and the public can rest absolutely assured that I will drive this idea through, quite regardless of the time, trouble, expense and disappointment I have to face."

"This would be a sort of post-post-graduate course," he continued, "for young men who have completed their course in our best schools in physics, chemistry, engineering, and especially in mathematical physics. Two years of hard labor of this kind, according to a certain selection of ultra advanced courses, combined with practical work of applying what they know to solutions of definite, difficult problems, intimately connected with what they have so far covered, ought to be sufficient."

"Take a few of the best-known research men of this type; there is Swann, of Minnesota, very generally admitted to be the most brilliant research genius in this country; Hersey, of Boston Tech; Buckingham of The Bureau of Standards; Bateman, of California; Max Mason, and ten or fifteen more, all exceedingly brilliant. We want ten or fifteen hundred men of this type, even if not quite of the same calibre, to solve

problems for us—all kinds of problems having industrial importance. What is more, we want them right now. Who would benefit, you ask? The colleges that turned them out in finished state, our large industrial organizations now in desperate need of such men, whether they realize it or not, and especially the general public, not excluding you and me."

Mr. Akimoff has had this research idea in his head for a great many years, and being the type of man who endeavors to put his teachings into practice, he tested the correctness of his ideas on a special organization he built up of expert research-men whom he trained especially for this purpose, having, of course, carefully picked them out as best fitted, morally and mentally, for this difficult work. Their line is research along just one advanced work, more correctly of mathematical physics, i. e., higher dynamics and its applications, especially the study of vibratory motion. Sometimes they have to put in vibration, but more often the problem is to take it out. They do both. This requires a great deal of mathematical and physical experience, and considerable ability to know where to start off, which is always the most difficult element of any problem. A great Frenchman once said that a problem well proposed is thereby half solved.

Mr. Akimoff called attention to the recent developments in the radio field which will convince anyone of the fact that the air, at all times, is full of vibrations of every sort, audible and inaudible. In a broader sense it can be truthfully said that the whole universe consists of nothing but vibrations of all kinds and manifestations.

Mr. Akimoff's organization bends its energies in the direction of mechanical, and sometimes acoustical vibrations. In some makes of automobiles you feel that sickening back-scratching effect at certain speeds. This organization has done a great deal toward eliminating this condition by means of special balancing apparatus used in many factories in regular production work. They have also worked out various types of apparatus for correcting vibration troubles in power plants and high speed machinery in general. All this is well standardized, and they maintain a special laboratory in which the elements of vibrations are being daily explained to everyone interested. Often (Continued on page 16)

"A thing of custom,—'tis no other"

Using the Right Thing in the Right Place

How one large paper manufacturing institution established and furnished the public with authoritative means of selecting the proper paper for any definite requirement

WOULD a lady promenade Fifth Avenue in a bathing suit? Would you walk into a hotel carrying a bandana bundle in preference to a suit-case? Would you drive a nail with a corkscrew? Would you hire a taxi and forthwith walk? Yet—

Some time ago a letter from a very prominent steel firm was received in our office. The heading of this letter had been richly produced in two colors from steel plates and the communication had been neatly typed. The general appearance was not unpleasing, yet one felt there was a something lacking to round out the inviting impression of the first glance. A second observation revealed the fact that the paper was entirely inappropriate in both quality and color tone. It was a low grade of writing paper, and, shades of inconsistency! a light pink in color. It recalled Dickens' "shabby genteel."

A day or two later we received a requisition form from the same firm. Marvellous to relate, the paper used for this was the highest grade of bond! A vision of a dress suit at a business luncheon!

This incongruity set us to thinking. We spent some time looking through our files, turning up various letters, office forms, and other material of like character that had been sent to us from numerous concerns. We were amazed at the result of this scrutiny. One case after another showed forms to have been printed on the wrong kind of paper. Apparently no careful analysis had been made by their purchaser or printer of the factors of use to which these forms were to be subjected.

The highest classes of papers have often been selected for estimate forms, invoices, order acknowledgments, and even memo slips and other short-lived forms, while important long-term contracts and letters of credit were found to be on cheap and impermanent papers, the incongruity presenting, to use an embellished figure of speech, a conglomeration of unrewarded virtues and over-dressed turpitude!

The paper of many letterheads, which should be *par excellence*, was considerably below par; the paper of what should have been permanent records was found to be broken at the creases, brittle at the edges, and its impressed (that is, the printed and typewritten) matter almost illegible.

Our survey demonstrated clearly that the selection of paper for any particular use was mostly haphazard, mainly arbitrary, and invariably unscientific.

Incidentally, were not the incongruities of paper uses in many large organizations the result, too, of ordering the stock independently by the different departments in that organization?

Then how was the unfortunate condition to be remedied?

Thousands upon thousands of various papers are thrust upon the market by manufacturers, each in varying grades, and distributed under an endless and confusing mass of trade names. More than two thousand kinds of bond papers, alone, under as many different names, flood the market. How was any paper consumer to make his selection; moreover, how was he to know that his selection was the right one? There was no standard to judge by—no yardstick by which

By ALBERT HIGHTON

Editorial Department, American Writing Paper Company, Holyoke, Massachusetts

to measure it. What was he to use, say, for a time-slip, or a job order, or a deed? Under the conditions, then, was the consumer blamable if he chose the wrong paper for any of his numerous needs?

Moreover, while the American Writing Paper Company had already achieved a large measure of success in standardizing its grades of papers, eliminating all excess grades in the process, yet the investigation we had made forced us to realize that the benefits of this standardization were not available to the consumer until his needs were interpreted in these standards. In other words, the fact was brought home to us, hitting us squarely between the eyes, that the product and its uses must be thoroughly joined up to secure the requisite utilitarian results.

Then, we asked ourselves: How can the right paper for any specific job be determined? Of course we already knew that certain papers called "weddings" were used exclusively for wedding stationery; that "ledger papers" were the basis of account books, and other papers were adopted for like special purposes, yet in each of these were multitudinous grades; but what about the thousand and one grades in the office forms which the average business man or manufacturer uses daily? How to put within his reach a definite, authoritative formula or means for selecting was a problem we felt ought to be solved.

We felt, moreover, that such a service could be accomplished only by a big paper manufacturing institution having every technical and scientific facility, and since our organization is possessed of every mechanical facility and composed of the best trained men in the paper industry, we naturally felt it a duty incumbent upon us to formulate such service standards, so we set about to undertake the work.

We felt, too, that no other paper manufac-

turer could attempt such a work, granted that he had conceived the idea, since most manufacturers confine their output to but a limited number of papers (albeit a large number of names), and would, therefore, not be interested in spending the time and effort required on such a comprehensive plan as we had decided to attempt.

Moreover, a paper manufacturer making only one or two kinds of paper who elected to do such work, would naturally confine his efforts merely to the limited types of papers which he himself manufactured, and inasmuch as he would probably be charged with having an "axe to grind"; in other words, since his motive might be construed as a means to sell his own product, the results, therefore, would certainly be discounted and the benefit would not be adequately appreciated by the general consumer.

Since the American Writing Paper Company makes in its twenty-six mills practically every kind of paper that can be made by the nine hundred or more mills in the country, we felt that our plan, if it succeeded, would redound not only to the benefit of the general consumer of papers, but to all of the nine hundred and odd manufacturers themselves. If we may be permitted to say it, the proposition was quite unselfish in its aim.

Considering these things, we appointed a thoroughly technical staff composed of laboratory men, mill superintendents, and other paper experts, which, headed by a man with a national reputation as an analyst of business problems, made a careful analysis of each use to which papers may be put.

Since this work of investigation and analysis was too huge at first to comprehend every one of the types of papers made, the company confined its sphere at the outset to bond papers. And since the company had reduced its lines of bond papers from one hundred and ten different varieties to specifically nine fundamental grades to cover all essential bond paper requirements and represent, incidentally, salient qualities and price spreads, the work was wisely confined to these.



A GROUP of American Writing Paper Company's technical men engaged in formulating methods to aid the business man in determining the proper selection of paper for each definite requirement. Mr. George A. Galliver, President of the Company, is shown at extreme right.

Members of the staff secured access to large concerns which use paper in huge quantities and in multitudinous ways, and out of the complicated mass of office forms and other material which they thus obtained—contracts, reports, invoices, receipts, etc., they studied and analyzed the requirements of each form, from the standpoint of the user, to obtain maximum efficiency and economy. To ascertain advantages or limitations of each paper when subjected to conditions and requirements of the press room, they visited and interrogated expert printers and lithographers.

Then they were confronted with another problem. What particular qualities of paper uses should be considered, especially as basic factors for determination?

Obviously, the qualities essential in a stock for letterheads would not be the same as those required in a job slip, neither would the requirements of a pay envelope be similar to those of an inventory order.

Finally a list of all the factors was drawn up, but it was found to be so long and to involve so many overlapping complications, that it was considered impractical; so, after a good deal of careful paring, it was finally reduced to conform to four specific headings. Here they are:

(1) *Longevity*, the length of time which a paper may be expected to resist decay. Is the "job" for which the paper is used to be of permanent, semi-permanent (or of statutory limitation), or of temporary character?

(2) *Treatment*, the amount and severity of handling, exposure and folding to which the paper will be subjected, thus involving considerations of the strength (tensile and folding), stiffness,

weight, and surface qualities of the paper used.

(3) *Impress or Impressibility*, designating the subjection of the paper to the hand or mechanical methods of applying reading matter, illustrations, decorations, or rulings. This factor includes consideration in general of the weight, opacity, the finish, and the erasive qualities of the paper in relation to the kind or combinations of impress.

(4) *Appearance*, the appeal to the eye and other senses by the paper itself regardless of the message imprinted upon it. Naturally, finish and color "feel," "rattle," etc., are important as affecting appearance.

The time and effort expended on this infinitely detailed work were enormous, as may well be imagined, but the goal was finally reached. As a result, the proper selection of bond papers, at least, may now be determined by the veriest layman.

Most important among the numerous advantages secured as a result of these labors are the following: Guess work is eliminated in buying paper; a real standard is definitely established for choosing the proper paper for its required use; therefore paper-buying is placed on a thoroughly sound basis; and the utmost economy is secured.

A detailed report of the investigation and analysis, with a specification chart showing the wide range of uses and the requirement of papers for those uses which was made after this mass of material was digested, has been interestingly rewritten and published in a booklet of sixty-four pages, entitled "The Correct Uses of Bond Papers for Business Purposes." Many printers and other large consumers of papers who

have received it have been exceedingly flattering in their comments apropos. One said of it that "As a contribution towards greater efficiency and economy in the use of all forms of stationery, the work compiled in the booklet is revolutionary, as much as it is a most decided evolutionary step forward."

As an interesting result of the publication of the booklet, the company has already received a half-dozen letters from as many large concerns requesting that its experts be sent to make a survey and report of their forms and to make the necessary recommendations.

The initial work having been completed, the attention of the Company's staff has been turned toward the appropriate specifications of other types of paper stocks for printing or other purposes.

A campaign, by means of full-page advertisements appearing in urban newspapers and embracing a circulation of two and a half millions throughout the country, announced to the public that a "yardstick for measuring paper" had been evolved and which described in detail the value of the booklet, brought an avalanche of inquiries. Demands for "The Correct Uses of Bond Papers" were so great that two days after the announcement appeared, the first edition of thirty-five thousand was exhausted, and a new printing was immediately ordered. Since then seven presses have been kept busy turning out the book; already fifty thousand additional copies have been published, and still the demand exceeds the output. This is concrete evidence of the general approval which business men are placing on the constructive service of the largest fine paper organization in the world.



From the Round-up to the Senate Chamber

Continued from page 8

Kendrick brought up the Democrats, Kenyon gathered the Republicans, and together with Kenyon as leader, because his party was in power, they worked to give the farmer a new deal. Fortunately indeed it was for Wyoming, that this group was in the position to make the farm bloc effective, for droughts and the collapse of the livestock market had so undermined the great livestock industry that scores of banks in the West were on the verge of failure and would have failed, bringing untold disaster in their wake, if it had not been for the fact that the farm bloc in the Senate insisted on reviving the War Finance Board and equipping it with funds to go to the assistance of the western banks which could not collect their loans.

When the first Kendrick ranch was established, a rule was laid down which the Wyoming Senator now quotes as a remedy for the periodic strike fevers that rack the coal industry. Indeed, his companions in the Senate marvel at the frequency with which Kendrick goes back to some incident of cowboy and ranch days to illustrate a point of statesmanship. But the rule was, that on the Kendrick ranches there should always be found winter work for all the men employed in the summer who cared to remain, because the young cattleman believed that steady work is the basis of all contentment and success. "I could never think of an employee of mine as a mere hand," said the Senator, "a mere instrument to be used as needed and then laid aside. A man is not a mere hand, he is a mind, a heart, a soul. In every man is the capacity for great things. Sometimes, very

often indeed, his possibilities are not realized in himself but in his children. In a great republic like ours, where some of our greatest men have come from the humblest beginnings—like Lincoln—we owe it to ourselves and to our posterity to throw all the safeguards we can around every home, because out of any home may come the great man or the great woman who, like Lincoln, will meet the Nation's crisis. Commerce and industry should be so organized that every man shall have sure, certain and steady employment. The great source of dissatisfaction and trouble in the coal industry is that most of the miners lack steady employment. They get good wages perhaps during part of the year, but for the rest of the year they must shift for themselves, and the consequent uncertainty is inevitably a damper upon ambition."

There you have the warm human sympathy that has made Kendrick beloved in every circle in which he has lived. There is no man in the United States Senate today who has more or truer friends in that body than Kendrick—and party lines make no difference. Party lines are pretty well broken down anyway in Washington and throughout the country. The people are thinking of men who stand for progress, for liberal and constructive legislation. Among these stands the cowboy Senator. From the beginning of his career in Washington he has been working for the things that progressive people in both parties seek. Of course, he was for woman suffrage. Wyoming was the pioneer suffrage State. He was for prohibition, and that at a time when every vote counted. Back in

the early days of the war, when it was first proposed to ban the manufacture of liquor as a war measure, an amendment to the food control bill designed to attain that end, was under consideration in the Senate committee on agriculture. Kendrick was a member of the committee, but he was also a member of the Committee on Public Lands which on that very day was considering the oil land leasing bill, and Kendrick was at the latter meeting, for the measure had vital interest for Wyoming. In the midst of the discussion word was brought to him that the prohibition amendment had failed in the committee of agriculture by a tie vote eight to eight. He left the public lands meeting, hurried to the room of the committee on agriculture, insisted that the question be reconsidered. His vote was counted and the prohibition amendment carried nine to eight. If it had not been for Kendrick's vote, the measure would not have been reported to the Senate.

He was one of those who voted against the Esch-Cummins railroad bill on the ground that it did not sufficiently protect the interests of the public and the railroad employees. It was he who started the movement for the investigation of the leasing of the naval oil reserves at private sale. So at every step of the road he has been found aligned against entrenched interests and special privilege, because, having risen from the bottom himself, having wrought out his own success, his aim throughout his public life has been to preserve the same opportunities for success for those who are now starting at the bottom.

My Friend—Marcus Loew

By JOE MITCHELL CHAPPLE

IT doesn't much matter when he was born—but it is what happened after he was born. In "Who's Who" the date of May 7th is given, but the year of the last century which witnessed the birth of Marcus Loew is left blank. Why, we never asked, for a more modest, frank and friendly man never lived.

He has a name that sounds like a Roman classic, but he has a disposition that is winning, for everybody associated with Marcus Loew has taken joy and pleasure in helping him to do big things—and those big things are just ahead of the other fellows.

He has the real Maytime spirit; he was born in the month of blossoms. He knows New York and he knows the people of New York. From his earliest boyhood days he came in contact with the people of the city, from all countries, and all parts of the country, and has done things with and through people, exemplifying to the highest degree the splendid genius of his race.

He seems to know how to encourage every artist to do a little better than he did before. He has a gentle way—a smile and a frankness that stimulates and cheers one like thunderous applause.

When I asked him, "Will you give me the secret of your success?" he replied with one of those encouraging twinkles in his eye: "I don't know. I'm just lucky! I always try to get ahead of the fellow just ahead of me."

He understands his New York from a real estate point of view, for the Marcus Loew theatres are institutions in the metropolis. They have become institutions all over the land, for he knows the value of real estate, especially when it is real estate considered as the location for a theatre.

His first outside theatre was established in Boston. He came over frequently to the Classic Club and observed what would entertain the "highbrows" as well as the "average brows." When he stands in the scenes behind the curtain, he understands how to produce the goods he is selling over the footlights. That completes the theatrical cycle.

Marcus Loew is now interested in sixty-eight corporations, but that doesn't matter. He can sit on the board of directors and do more directing in ten minutes than some men in ten years. He knows how to choose lieutenants.

What impressed me was the kindly, motherly "Aunt Mary" who sits at the outer door of his office. She is so kind and considerate, with none of the blasé, cynical air of the salary-getter. She seemed to be earnestly interested in everybody that arrived to do business with the Loew institution, receiving them like a hostess. All that she lacked was mince pie, crullers and a cup of coffee—a "stop-in-and-have-breakfast" sort of way.

Marcus Loew is a small man physically, but has the dynamic force of a Napoleon. His business has been a gradual evolution, and is counted one of the most thoroughly systematized, well organized theatrical institutions of the country. He has his own ideas, and is right there to express them. He does it frankly, but not obstreperously, for he always has consideration for the other fellow—if his purpose is right.

When he was selecting the name for his new



MARCUS LOEW attributes his phenomenal success in the most intensely competitive business of modern times to "always trying to get ahead of the fellow just ahead of him." Also, he says, "I'm just lucky." He has faith in his own star. Curiously enough the theatre-going public that flocks eagerly into the Loew houses (more than a hundred thousand of them every week-day evening in the year), knows hardly anything about the personality of the little giant of the amusement world who knows so much about them. Marcus Loew's supremacy in the theatrical field has been gained not by forced publicity, but by hard, consistent, continued effort, and by intensive study of the likes and dislikes, the moods and mental reaction of the patrons of his theatres—and most important of all, "always trying to get ahead of the fellow just ahead of him"

theatres, he chose "State." There is something significant in that name. The American, National, United, and all other names in the vernacular had been utilized—then someone suggested that simple name of five letters, which does not require much electric light, but says a good deal, especially when associated with the magic name of Marcus Loew. When you associate the two names you have a combination worth while to the amusement public.

Loew's "State" indicates a state of mind and a standard of entertainments produced. Then,

too, it unconsciously comprehends the great ideal of the day—the state—for the union is the state, and the union is composed of states. The stately word "Commonwealth" of early days is now translated "state."

Marcus Loew has reached the estate of a leader with his "State" theatres. He is insistent upon having them maintain a standard which the state or the public would require, without the insidious interference of a few self-confident minds, who have an idea that they are fitted for censorship and can do the thinking and seeing for all people.

This was evidenced in Mr. Loew's production, "The Four Horsemen of the Apocalypse," which was censored twenty-six different times in twenty-six different states. No two censors agreed, and if the exhibitors would tell the public of the cuttings made on this film, it would make "laughing-stock" five-reel comedy on censorship. It shows that the theatre man, after all, realizes that the public will hold him responsible and take from him his patronage if he does not recognize his moral and entertainment responsibility. And patronage is the censor board that makes him wake up.

When Mr. Loew came to Boston to open the "State Theatre" it was an event. Loew's "State Theatre" is the largest motion picture theatre in New England. It is located near Symphony Hall, the new art amusement centre of Boston. On the opening night the theatre was aglow with all the patriotic fervor that its name implies—flags, flowers and fun. The Governor of Massachusetts and the Mayor of Boston were there and made addresses with official unction. On the stage was an array of motion picture "queens," "kings," "aces"—they were all "face cards."

When Mr. Loew made his address, after being introduced by Theda Bara, the original and charming vamp, he made some frank declarations, insisting that the motion picture industry was not perfect; that it did not claim to be such; that the people had found that their idols were as clay; but the very fact that it was the subject of such criticism indicated that it was a success with the people. In his talk he indicated his appreciation of Boston, where he made his first start in an outside theatre. It was an event in which the staid professors of Harvard and all the other institutions of learning in Boston participated, as well as a goodly representation in the galleries from the suburbs and outlying districts. It was a representative gathering. They forgot all about suburban trains—and held the subway open.

As we stood behind the stage on the second night a significant remark was passed. The second night was not a "paper night." It was a night on which everybody paid for their admission, and the applause came thick and fast. It had a mellow, rollicking sound, interspersed with that swift, gatling-gun staccato—emphasis of the bleachers at the ball game.

"There you have it," said Mr. Loew. "When they pay for a thing and get their money's worth they are ready to applaud, and when they don't like it they walk out." That's what vaudeville is—the supreme test of entertainment. Vaudeville was the forerunner of the motion picture

audience, because it must touch at some point the interest of everyone in the audience."

Here's an indication of the crisp philosophy that indicates why Marcus Loew carries off the lucky bacon.

When you look into the telephone book in New York you find a whole string of Loew's Theatres. The same is true in all the other cities. Marcus Loew has become a national character, and indirectly has as much influence as any single statesman that responds to the roll call in Congress. And yet, his one object is just to do the right thing and to be just and fair to everybody. That is why the Marcus Loew organization is so cohesive, and why his entertainments are so coherent.

When he made his broadcasting speech at Medford Hillside, the radio carried the message of Marcus Loew as far south as Cuba, and as far west as Texas, and on to Prince Edward Island on the north. It was the natural evolution of the magical manner in which he has projected himself through his organization in the theatrical world.

Associated with him are his two sons, and altogether Marcus Loew has reason to believe that the Loew family are in the theatrical business for some time to come. He is a great admirer of General Will Hays, who is now helping to direct and aid the destinies of the motion picture industry and art.

There does not seem to be a phase of the theatrical production, construction or destruction that has not come under his attention. They may not know how to pronounce his name (they call it "l-o-w" and "l-o-i-e"), but they know the man. Rest assured that he has made that name of four letters as distinct as the spelling. The "e" is not required, but the "e" might be considered as indicating emphasis that is placed upon the name "Loew" today in the public mind.

Even within the glow of the theatre marquee, marking the entrance to a Loew theatre, you feel there is one place that the wayfarer may drop in and feel that there is the spirit of a little man, impervious to flattery and criticism, who is moving at a swift pace these days—just get-

ting ahead of the fellow in front of him. Some day the problem will be "who's in front of Marcus Loew?" That will be another story.

* * *

The details of his life are an inspiration to ambitious American youth. At the age of seven he sold papers, working from sunrise until school time, and then after school until midnight. There are no such things as hours considered when real ambition is involved.

At the age of nine he left school, and at ten years of age went to work for a map printing concern. A little later he went into the printing business with a lad two years older than himself. They set up a hand press and printed visiting cards, then installed a foot press and finally a weekly paper of eight pages was launched called *East Side Advertiser*.

Here the lucky star of Marcus Loew began to rise. The paper met with surprising success and paid the partners \$12 a week, with a circulation of five hundred copies.

At the age of twelve he tried dry goods, and later secured a job in a factory handling furs and making dress trimmings, at the magnificent salary of \$4.50 a week. Every penny he could earn was needed to help at home. At the age of sixteen he was the chief of the factory's fur department. By the time he was eighteen he had saved a few hundred dollars and started in the fur business for himself. Then the real test of building success began. He failed with liabilities aggregating \$1,800 more than his assets—but he paid the difference and still kept his eye on the fellow just ahead. He established credit in the old-fashioned honest way by paying one hundred cents on every dollar. At twenty-three he was married and started in the fur business a second time. Again he was wiped out, but nothing daunted he concluded that he had learned something about management, and met all liabilities, closing his accounts with a balance of \$7 plus. Then came the era of golf caps and capes, and lucky Marcus Loew was at it again, and this time succeeded.

He had some out-of-town friends who were interested in starting a penny arcade picture

business. Marcus Loew knew nothing about amusement enterprises, but felt quite sure of it if another fur man was willing to go in. He was ready to take a chance. The amusement place opened at Union Square in New York City, and represented an investment of over a hundred thousand dollars, but the money came back in seven months. The lucky star of Marcus Loew rose higher and higher out of the earlier failures. Then he built an arcade of his own on Twenty-third Street. It cost \$150,000. It was slow work getting back that \$150,000 in pennies, and there were dark days, but in five months one-quarter million dollars in clinking copper coins told the story of success.

Then came motion pictures—a mammoth evolution. He started a picture show in Cincinnati. Then he experimented in his arcade on 125th Street, New York, and supplemented this with picture houses all over the country, utilizing empty stores, making small moving picture theatres with a capacity of from one hundred to three hundred spectators. It was not long before he had forty of them in operation, for Marcus Loew takes not counsel of his friends, believes in wholesaling.

His friend, David Warfield, sent him an actor one day who was stranded. Loew billed him as an extra attraction, having him recite "Gunga Din." It did not go strong, but "Mandalay" won, and the man stayed on and on, and today is one of the actors who names his own figure to managers. This is Marcus Loew's way of doing things. Then came the "Cozy Corner Theatre" on Broadway with pictures and vaudeville at ten cents—the first ten-cent show on Broadway. These little dimes in the course of a year netted him \$60,000, and it encouraged him to secure more theatres. He kept on developing popular attractions, and now thinks no more of establishing or building a new theatre than he does of buying and putting on a new necktie. Through all the vicissitudes of his rather remarkable career he has remained just Marcus Loew, the generous, kindly and level-headed philosopher and friend. He still keeps his eye on getting ahead of the man just ahead of him.



Coleman Cox's Business Philosophy

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"Take It from Me." He has distributed thousands of the books in prisons, believing that the TRUTH contained in it would help make better men of those who were paying the penalty for not having lived it; and other thousands in high schools, hoping that his advice might start young men down the road of life better equipped for the fight against WRONG.

But soon after the first edition had been printed he found the demand for the book was too great a financial burden for him to carry. He was forced to place a modest price upon it, and out of his desire to spread abroad the pearls of wisdom he had slowly and painfully acquired over a period of thirty years has sprung, almost overnight, a veritable fountain of wealth.

And now the moving picture people are flashing Coleman Cox's ideas upon the screen. The California Theatre in San Francisco ran the paragraph for twelve weeks. The public was so well pleased that the producers went after him in droves for the privilege of illustrating them and booking the film throughout the United States. An agreement was arrived at,

the films have been made, and shortly every reader of this modern Arabian Nights tale will be able to see Coleman Cox's ideas visualized upon the screen of their favorite theatre.

And "take it from me," that's about the final seal of public approval.

Research

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this is a group of engineers from a large organization—sometimes a young mens' club, or a few Navy officers taking a two-months' post-graduate course with them. They always explain everything the interested man wants to know—there is nothing to hold back. They do not believe in such a thing.

But the most difficult work, according to Mr. Akimoff, is dabbling into problems with insufficient data. A large organization, say a branch of the Government, comes to them with a complaint like this, "It has been reported that such and such a thing is apt to give trouble; sometimes things break and at times they do not. We would like to know why they do, or why they do not, under the same set of working conditions." Now, systematic experimentation is not always possible, and the only thing to do is to go with

a fine tooth comb through the scant data and reports actually available, in the light of several years of similar experience back of them. This often is a problem that beats anything Sherlock Holmes ever encountered. It is not often that they even see the things they help to fix. "Talk about lack of romance in science," smiled Mr. Akimoff, "we are known to breathe in quantities of it daily."

He concentrated his gaze out of the window, and then turned to me and said "But I mentioned these things only by way of typical illustrations of what I understand and advocate as the most crying need of our age—trained research men. It positively is not enough to provide a neat looking building with all kinds of instruments and special machinery for training a corps of young men to sharpen their minds,—to detect the limits of the problem and formulate that ever-ticklish answer to the usual question, 'Where do I start?'"

This has set me wondering. To how many other things could this exhaustive process be applied to better them or make them cheaper, more economical or useful in this haphazard age of ours. Research work is being done every day in a slip-shod and clumsy way. When will it be systematized?

"Under the tropic is our language spoke"

Among the Isles Where America was Born

The Porto Rico which Columbus christened "Borinquen," with its lure of tropic splendor, is making new history under the American flag

FOUR hundred years ago, long before the Pilgrims landed on Plymouth Rock or any white settlement had been made on the North American Continent, Columbus, on his second voyage from Spain discovered and named "Borinquen" the beautiful island that is now known as Porto Rico. It was from Porto Rico that Ponce de Leon discovered Florida. Four hundred years is more than enough in which to develop a race. The Porto Rican is the most American of all white men. In fact, he is as truly American as any born on the continent.

When the black cloud of the World War darkened the horizon, our newly-made citizens of Porto Rico demonstrated conclusively their loyalty to our nation, and let it ever be remembered that the Porto Rican regiment was the first in our nation to be recruited up to its full war strength, and that this fine regiment was sent to guard the Panama Canal—a mighty and glorious undertaking.

For the past twenty-three years the Porto Ricans have grown with the standards and methods of American education and business life. They have proven their readiness to offer their dearest and best to the cause of world democracy and American liberty.

We, of the mainland, should feel proud, indeed, of our citizens of this historic island of America.

By MAJOR J. B. JEFFERY

PORTO RICO—*Jewel of the Caribbean Sea. The isle of eternal spring, whose palm-clad peaks and crystal streams diversify fertile plains and lovely valleys rich in resources and production and populous with intelligent and prosperous citizens, four hundred years American and intensely loyal to the Union.*

Where this monument stands Columbus, in the name of old Spain, turned over a new page in history and laid the foundation of modern civilization.

American national sentiment can indicate no more venerable spot beneath the Stars and Stripes, nor American business find any more inviting field than Porto Rico.

As we rejoice in the Californian, the Texan, and the New Englander, let us glory that the Union includes the Porto Rican, who stood shoulder to shoulder with us for our common interests in the great war.

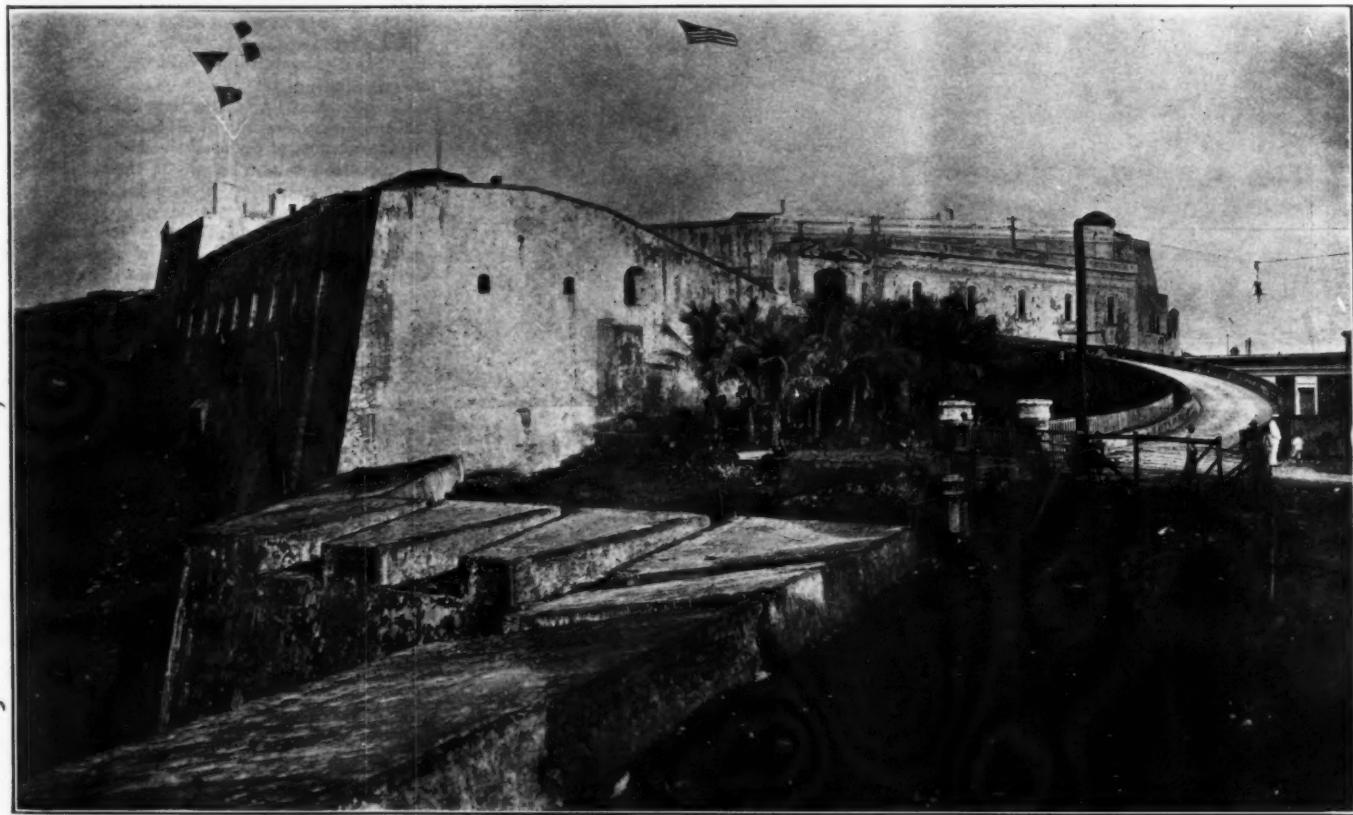
The continental American who goes to Porto

Rico and is not blinded by prejudice, soon discovers that he is among the finest type of American citizens to be found anywhere, and will see many demonstrations of their love for America.

What Porto Rico needs just now is interpreters, who know and appreciate their fine traits of character, idealism, Americanism, and loyalty to the great principles for which the World War was fought and won. Many Americans know of Porto Rican sugar, grapefruit, cigars, coffee, etc., but they are as ignorant of the splendid characteristics of our fellow-citizens of this island as they are of those of far more distant parts of the world. Such ignorance might have been pardoned previous to 1898, but today it is stupid. It is doing an injustice to a people whose patriotism and loyalty to America exceeds that of some Americans whose ancestors came over within one hundred years of the *Mayflower*.

The fine courtesy and the moral safeguards which protect the home circle indicate the artistic sense of a highly cultured people. You can go from one end of the island to the other and you will receive only courtesy and respect from these hospitable American citizens.

The Continental who really knows and understands the Porto Rican can strengthen the ties of love and respect that should unite them for evermore. No spot under our flag is inhabited



'Neath the forbidding walls of Fort San Cristobal, San Juan, Porto Rico



One of the world's greatest highways—the Military Road in Porto Rico



Princess Walk, San Juan, Porto Rico



France Avenue, San Juan, Porto Rico

by a more completely loyal citizenship of the Union than Porto Rico. Give Porto Rico a chance and she will justify all that is claimed for her and more.

The Porto Rican is descended from the best stock in Europe. He is well bred and shows it in every gesture and at every turn. Their homes reflect their artistic taste. Their social life is charming, and their hospitality is soon felt by all visitors to the island. We must not overlook the fact that the Porto Rican is descended from the Latin race, therefore is full of sentiment. Kindness is to them most important. The advanced and progressive type of Porto Rican is a man of culture, highly educated and reads along lines other than his specific calling. The Porto Rican is always ready to take a man at his word and give him credit for the highest motives and best intentions. They have tender hearts and are responsive to human needs.

We cannot overlook the splendid progress Porto Rico is making, a development which is contributing its full share to our national growth and prestige. At this time, when it should be the aim of every loyal American to encourage trade and commerce with all Pan-American countries, every effort should be made to co-operate with the Porto Rican people to this end. In dealing with people of Latin origin, tact and diplomacy are factors most essential.

We, as Americans, should learn to fully understand and appreciate the sterling qualities of the people of our island. There should be the closest bond of relationship between us—patriotic, commercial, and social. It is to our mutual interest.

Porto Rico is a fascinating country, with its royal palms and waving fields of sugar cane, unrivaled motor roads, flowers and foliage, mountain views, marvelous sunsets, vivid coloring, attractive homes, old historic points of interest (such as the place where Columbus landed, and Casa Blanca, the old homesite of Ponce de Leon), but all of these are far less attractive than the people themselves. This little Switzerland of America is populated by a class of people whose fine characteristics are recognized by all who know them intimately. They rate friendship, kindness, and courtesy above all things.

The great strides that Porto Rico has made in all things speaks volumes for their progressiveness, and most of the credit is due to the splendid co-operation of the people of the island. They have made a quick response to all the changes that were necessary for development in education, commerce, and industry. It seems easy to predict that barring untoward and unexpected events, the next two decades will see an even more wonderful progress and development.

In the Department of Education, the conditions are most gratifying. In the last two decades there has been created in Porto Rico a modern democratic school system. As to the character of the school buildings, they are thoroughly modern in construction. Each year sees more and more attention given to the work of the rural schools. The University of Porto Rico, with its liberal arts, law, and pharmacy and other institutions, located in Rio Piedras, and its college of agriculture and mechanical arts located at Mayaguez, is proving increasingly efficient each year.

The island government maintains official medical, pharmaceutical, and veterinary examining boards, who periodically admit to practise qualified Porto Rican boys and girls.

Above all, the variety and character of the education, the spirit and quality of the work have been broadened, modernized and liberalized, in accordance with the standards and ideals of the twentieth century. There have been five hundred and twenty-nine public school buildings erected within the past twenty-two years. Out of a budget of ten million dollars, passed by the recent Porto Rican legislature and

approved by Acting-Governor Jose Benedicto, a little more than \$4,000,000 is set aside for the public schools of the island. This is one million dollars more than the previous school budget, and the largest ever appropriated for education on the island in any one year.

The Department of Interior has shown impressive evidence of rapid achievement in the matter of Public Works. There has been great progress in roads, trolley lines, railroads, telegraph and telephone lines, cables and ships that enter the harbor.

Porto Rico is pierced in every direction—from the sea, over the peaks of the mountains and through the valleys, by a wonderful system of automobile roads. In fact, Porto Rico is one of the pioneer communities in the "Good Roads Movement." Every one of the seventy-six municipalities can be reached by automobile, over roads which cannot be outclassed anywhere.

In motoring over the beautiful military road, one of the greatest highways in the world, one is filled with admiration and wonder at the skill and labor which produced this marvellous feat of engineering. There are parts of this road, which can be described as a perfect figure eight, in climbing to a summit, where the grandest panorama on earth can be described—a view where two oceans, the Atlantic and the Caribbean, lie at your right and left hands respectively and from which point, more than twenty towns can be seen. Some of the roads are centuries old, and veritable monuments of early Spanish military engineering.

From the time one leaves San Juan, the capital city, to motor over the great military road to Ponce, a distance of one hundred miles, one's imagination is delighted with the picturesque chalets, their variety of construction, magnificence and comfort and the glorious gardens and palm trees, sugar cane fields, coffee trees (with their crimson berries), flamboyant or fire trees (with their huge flame of colored blossoms), orange and grapefruit trees.

The tropical growth, lining the road on both sides for the entire distance, cannot fail to bring forth exclamations of delight from the sightseer. Those who admire the roads in California would revel in those of Porto Rico. Nowhere can be found such a kaleidoscopic panorama, incorporating the grandeur of Switzerland, the rare beauty of the tropics and the ease and comfort of locomotion of a New York boulevard.

The Department of Health makes a fine showing. Modern methods and agencies of guarding the public health have been introduced, such as quarantine, hospitals, scientific study of the causes, systems, treatment and prevention of disease, and the whole medical profession mobilized so as to co-operate in safeguarding the health of the people.

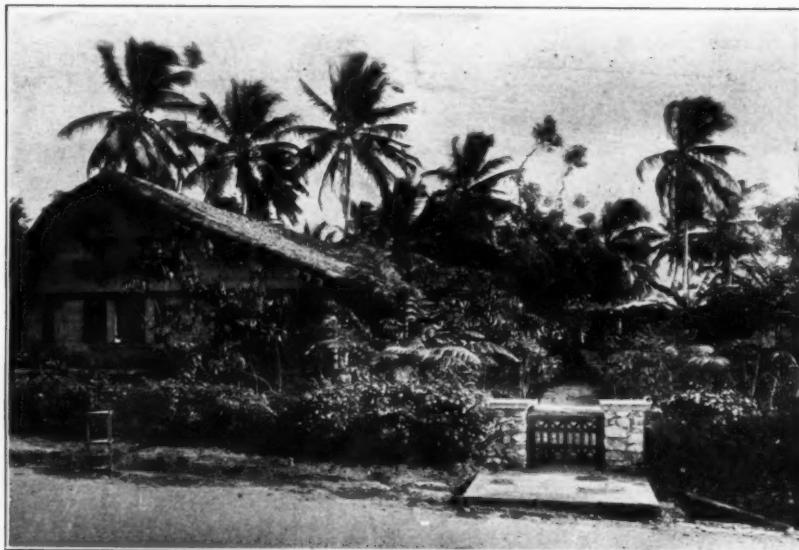
The statute books of Porto Rico are strewn with helpful laws. The workman's compensation act is a piece of legislation in line with our best state or federal laws. Porto Rico, by its own act, has established the eight hour system and the minimum wage for women.

The liquor interests in America caught their breath when Porto Rico went dry by popular vote in 1917. These measures are entirely due to native initiative, and they are honestly and efficiently administered with a thoroughness and sincerity which marks the way things are generally done in Porto Rico.

The immense increase in industrial business can in part be indicated by the increase in foreign trade, which has risen from \$17,502,103 in 1901 to \$141,896,400 in 1919. The total exports for the year 1919 were \$150,811,440, an increase of almost 90 per cent over that of the year previous, and about \$70,000,000 more than the highest record for all previous years. The imports also broke all records, reaching a total of \$96,388,534. This is about fifty per cent greater than any other previous year. The total external trade, therefore, of the island during



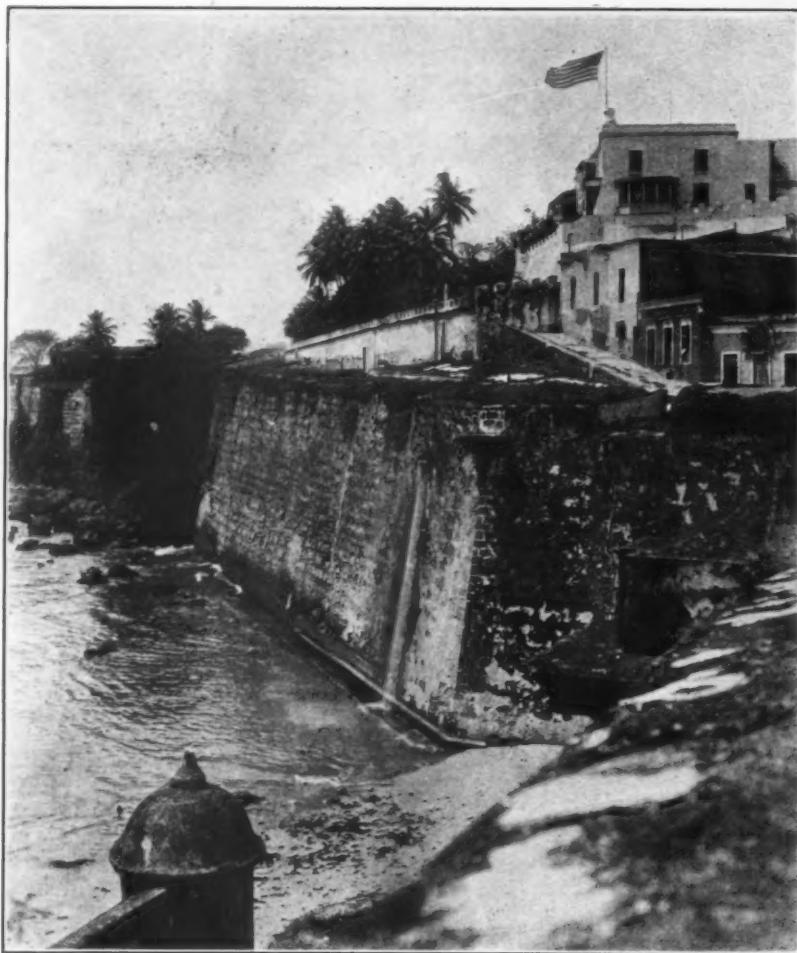
Palace garden, San Juan, Porto Rico



Picturesque bungalows, San Juan, Porto Rico



Columbus Springs at Aquadilla, Porto Rico, where he replenished his water supply



The famous Casa Blanca, San Juan, Porto Rico



Ocean Walk, Borrinquen Park, San Juan, where bathing is enjoyed every day in the year

the year 1919 was \$247,199,983, an increase of 74 per cent over the figures of the previous year.

The postal service is another instance of the splendid organization and high working capacity of the Porto Ricans in both private and public undertakings throughout the island. The office of postmaster is occupied by a Porto Rican, who has been in the service since 1898, and the positions in the post offices throughout the island are filled by natives, also, who are doing credit to this government work.

The Porto Rican lawyers and people have been so quick to adopt the best features of American law and procedure that the change in the past twenty-three years has been remarkable. They have organized and are now administering practically an American system of justice. This includes the petit jury, writ of habeas corpus, injunctions, mandamus, quo warranto, codes of evidence, of criminal procedure and of civil procedure, as well as the American political code and penal code.

In everything that enters into the life of a people there is to be seen this marvelous change and progress. In the large number and character of the crowded shops and stores, in the traffic that throngs the busy streets, in the voluntary organizations formed for pleasure and for social welfare, and especially in the number and quality of the newspapers that make up the press, in fact, in everything there is written the record and proof of twenty-three years of a most remarkable progress.

American citizenship was not conferred upon Porto Rican people until March 2, 1917. One month later, our country entered the Great War. Shortly thereafter the draft law was enacted and these newly-made citizens were called upon to submit to obligatory military service. They responded loyally and registered their young men on July 5, 1917. A similar spirit of patriotism characterized them throughout the war. They cheerfully assumed all responsibilities and sacrifices incident to their citizenship. They subscribed for many millions of dollars of Liberty Loan Bonds and gave freely to all other funds raised for war purposes.

The social life of Porto Rico is on a par with that of the principal cities of the world and the island is well supplied with handsome clubs and casinos. At the brilliant balls can be seen some of the most beautiful types of women in the world, and not even in New York or Paris are they better gowned. Many of these people are as much at home in the capitals of Europe as in the United States. The beautiful homes in their tropical settings compare with those in California.

Some of the greatest orators and writers are to be found here. Porto Rico has produced numerous authors, both prose and verse, many noteworthy poets and historians of international fame, and wonderful artists. In the professional world here you will find brilliant lawyers, proficient medical men and wonderful surgeons. It is a country where the company of brilliant minds can be enjoyed.

In almost every country, Porto Ricans have distinguished themselves in some pursuit of life or other. Their name and their island is connected with some of the greatest events known to mankind. It was on this island that Morse made the first tests of his telegraph. The greatest treatise on international law, it is claimed, was written by a Porto Rican. Educators from this island have been selected by many Spanish-speaking countries for their universities.

The politeness, so characteristic of the Latin-American, is evidenced everywhere. Even in the interior of the country one cannot fail to note the hospitality exhibited toward the stranger. They are ever ready to share their home and consider it an honor to do so. They possess a fascinating manner. Hospitality, politeness, and happiness are evident on every side. The home life is ideal and the beautiful children are the admiration of all visitors to the island.

"Like AEsop's fox, when he lost his tail"

Borestone Mountain Black Fox Ranch

Domesticating shy denizens of the wilds for use of man. The huntsman is now supplanted by the rancher in supplying milady with her furs

YEARS ago the hunters were chasing the fox and bounties were paid for pelts. Now the demand for furs and scarcity of the wild fox has made fox-farming a profitable ranching proposition.

Fox-breeding is not one of those fads that have proved futile. Those who have gone into the raising of foxes with intelligence and stayed in it with determination today hold high rank among livestock raisers. The industry indeed has developed some masters of commanding genius. Among such, one of the greatest is Robert Thomas Moore of Philadelphia.

The Borestone Mountain Fox Ranch at Onawa, Maine, designed and built by Mr. Moore, is one of the most attractive animal show places in the world. After the ranch had been established some time, Mr. Moore bought the remainder of the tract of fourteen hundred acres, which takes in the entire mountain. Borestone is the most picturesque mountain in Maine. Its top is notched in the shape of a rough U, forming an elevated valley of rugged beauty. Standing three thousand feet in height, apart from its main chain, the mountain is visible fifty miles away, and its peculiar top has been a landmark for more than a century. At the bottom of the summit gap are three ponds, crystal in clearness and of great depth. Between two of these ponds Mr. Moore twelve years ago located a summer home.

For several years he investigated the natural conditions that produce the best foxes, and, against some traditions of fox breeders, concluded that the notch at top of Borestone mountain was an ideal niche for his ranch. Accordingly, he started it in the summer of 1916 with three pairs of foxes, and from that beginning it has now one hundred and two adults and one hundred and twenty pups born this year. These are all pure thoroughbreds, registered in the American Fox Breeders' Association. Although Mr. Moore is making a commercial success of this undertaking, his main purpose has been a scientific one. By avocation he is a naturalist. Also he is editor of a scientific magazine devoted to animal life.

Mr. Moore displayed both originality and scientific judgment when he discarded the traditional dictum that a fox ranch should be upon level ground and have rectangular borders. Writing on "Ranch Sites" in the *Black Fox Magazine*, he made it clear that the Borestone conditions, as treated by him, were all that could be desired. They gave him good drainage, a water head for light and power, opportunity for observation of the fox pens, bottom formation that made prevention of burrowing easy, and the isolation and silence requisite to the welfare of shy and crafty Reynard. Some apparent disadvantages Mr. Moore turned to advantageous account. The sheer cliffs and thinly-earthed ledges lent themselves to economy in fencing and protection against burrowing. One item was the saving of 24,700 square feet of wire netting worth more than \$600. The keeper's house is one hundred feet above the pens, and a fox keeper of long experience has said that this one feature has solved the greatest problem of fox ranching, namely, to provide an inexpensive

observatory that the keeper can reach without being seen, heard, or scented by the foxes.

Four live fox shows have been held in North America—the first and second in Boston, in 1919 and 1920, and two others in 1920 in the cities of Muskegon and Montreal. Mr. Moore owns the three grand champion foxes of the three largest of these shows. At the first Boston show the Borestone ranch won the grand championship and more ribbons and prizes than any two other exhibitors. Its winnings at the second Boston show were even larger, nineteen ribbons and five cups in all. Mr. Moore did not make any entry in either the Montreal or the Muskegon show, but he now owns the grand champion from Montreal, Borestone Reid, 96 1-3 points; eight of the other highest prize winners were exhibited at the Boston show and beaten by his Loami 96, while the champion at Muskegon and the two highest scorers there were beaten at Boston by Loami of the Borestone ranch.

Five foxes born on Borestone were entered by purchasers in the Muskegon show of 1921 and made the highest average score in the show—94 4-5 points. Borestone Selma Seventh scored 96 points, and was awarded the cup for the highest scoring female fox and the highest scoring black fox.

Mr. Moore has been chairman of the fox show committee of the American Association for three

years and is responsible for the holding of these shows. When he first tried to interest the breeders in a live fox show, he met opposition on all sides, objections being raised on the ground of the danger to such valuable animals from keeping them in small cages during the time of the show.

It was probably about three years before he could persuade any of the associations to hold a show. Finally the American Fox Breeders' Association gave him its backing and made him chairman of the first show committee.

Speaking of valuable "animals," it is interesting to note the figures in the January, 1921, schedule of prices of Borestone Mountain Fox Ranch. Pups from various pairs are offered at prices ranging from \$1,200 to \$2,500 a pair. Probably the aggregate value of the two hundred and twenty-two foxes on the ranch is several hundred thousand dollars.

As side issues, the ranch has a herd of registered milk goats from Switzerland, the milk of which is immune from noxious germs, a large rabbitry and other sources of food supply, such as trout and other fish, which Mr. Moore raises in his fish hatchery. The ranch is not incorporated, being owned outright by Mr. Moore. Careful records of the foxes are kept, not only of litters and ancestors, but also of individual traits of all the animals, which has enabled the



BORESTONE Mountain, Maine, the beautiful and romantic spot where Mr. Robert T. Moore has established a black fox ranch in one of the most picturesque localities of a state that is noted for rugged scenic beauty.

owner to develop a superb type of silver black fox.

Mr. Moore's output of literature relating to the fox raising industry has been notable. His championship of black against silver foxes, n



ROBERT T. MOORE, one of the outstanding figures in the black fox raising industry, has established one of the most attractive animal show places in the world—Borestone Mountain Fox Ranch at Onawa, Maine. He owns a tract of 1,400 acres, comprising the entire Borestone Mountain—one of the most picturesque in Maine, with three beautiful ponds, at an elevation of 2,000 feet, overtopped by two stately peaks towering another thousand feet toward the sky and visible for fifty miles away.

description of the Borestone ranch and his thesis on ranch sites are fine specimens of lucid and engaging diction.

The breeding of thoroughbred foxes is today quite as scientific a matter as the breeding of high grade cattle or horses. There are several registry associations, the most important and largest being the American Fox Breeders' Association, whose office is located at 229 Congress Street, Boston. A fox to be registered as a thoroughbred must have had three generations of pure bred silver-black foxes previous to the fox for whom registration is applied. In addition, there is advanced registration, which is of great value, because it puts an undeniable stamp of merit upon the animal. To obtain this highest form of registration, the fox must be judged by the most competent experts in the silver fox business who have been appointed judges by the board of the Association, and the animal must obtain eighty-five points of a possible one hundred under the standard of perfection of the American Association.

Most of this judging is done at the competitive shows held annually in Boston under the auspices of the Association. Last year nearly one hundred and fifty live silver-black foxes of highest quality were shown in Boston on December 1st and 2nd. These came from all over North America, at least forty of them having been sent down from Canada.

The latter were the pick of the Canadian foxes, many of them having already taken the highest prizes in the Canadian Fox Show at Montreal. Among these foxes was one that subsequently was adjudged the highest scoring fox at the Fox Show in Muskegon, Michigan.

Despite this keen competition, the Borestone foxes took more prizes and ribbons and cups than any secured by any other competitor: four firsts, three seconds, and five third ribbons, and in addition the majority of the silver cups offered. Most important, they won the ribbon for the International Championship of North

America with their fox "Borestone Loami," which was awarded ninety-six points under the Standard. Mr. Moore relates some incidents concerning his pets:

"Many of our foxes are very tame and will eat out of our hands, while others are always shy, and nothing seems to take this away. Last spring we had one of the tamest foxes we have ever developed. This animal was brought up in the house with the two young children of the superintendent. It was reared entirely on a bottle and for the first week after its eyes were open the bottle had to be held while it was nursing. It soon got in the habit of running about the house and following the children, playing with them like a kitten. When it was let out of the house, and was tired of exercising, it would come back and scratch at the screen door just as a house dog would do.

"At night the room where the children slept was shut off from the rest of the house by a door. If this was blown open by the wind, this fox would go into the room, find the bottle that the baby had thrown on the floor, suck out any milk that was still in it, and then chew up the nipple. After this it would jump into the bed, crawl under the covers and sleep between two children, and be found there in the morning.

"It continued to be very playful, even when mature, at which time it was placed in a pen by itself. 'Patsy' is still a very affectionate animal. Whenever I enter the pen, it jumps on my shoulder and puts its face against mine. At other times it will take my handkerchief out of my back pocket, and if I seize the other end, will play tug-o'-war with me.

"Silver black foxes seem to be quite as keen and intelligent as one believes the red fox to be in the wild state, from various incidents told. But in some ways they seem surprisingly unintelligent. I will give you two incidents, showing first a remarkable case of intelligence, and second, apparently the opposite:

"We have a carpet netting on our pens three feet wide, which is laid on the ground. This carpet is laced to the wall netting at the ground level and rocks laid on the netting to prevent the foxes from burrowing out under the wall. The foxes will go up to the wall netting and start to burrow there. Of course, all they can do is put their paws through the holes in the two-inch mesh and dig at the dirt. In so doing, they make many large holes under the netting. On one occasion I was handing a lump of sugar to one of my tame foxes. It slipped from my hand and fell through the mesh of the netting, lodging on a projecting bit of earth about three inches below the netting. The point where it lodged overhung a considerable hole, about one foot deep, directly below the point where the sugar stopped. If the fox had attempted to put its paw through the mesh directly above the lump of sugar, he would have dislodged the lump and it would have fallen down into the hole beyond his reach. Instead of doing this, the fox made no effort to reach it for fully a minute, examining it very carefully, first with one eye and then with the other. At length he put his paw through a mesh in the netting about four inches to one side of the lump of sugar, placed his paw immediately under the lump and raised it to his mouth. This would seem to be a case of pure reasoning, and not instinct. For such an incident had certainly never occurred in the life of this fox and probably not in the life of its ancestors.

"Despite the intelligence shown by this animal, few of our foxes show much ability to reason in regard to ways of burrowing underneath our wall netting. If the foxes could reason as consistently as the above animal did, it would seem easy for them to perceive that they could start to burrow at a point just inside of the carpet netting, tunnel under the three feet of netting, and get out. We have one fox that has done this repeatedly, but I am inclined to believe that it did so on the first occasion

by pure accident, and so discovered the trick, for many of our foxes that are constantly digging holes in the earth and trying desperately to escape from their pens in various other ways have never solved this apparently easy problem. Their habit is to rush up to the wall netting and start to dig there, where they are immediately stopped by the carpet netting.

"A fox can dig a hole quite a number of feet deep in one night, so that if this power of reasoning were common to them all, we would have far more foxes to catch than we do.

"This catching them is not a difficult matter, for about all of our pens, and enclosing them all, is a guard fence nine feet high of the same material as the wall netting of the inner pens. When the fox gets out of the inner pen, he is still inside of the guard fence where we can catch him at our leisure.

"Another anecdote occurs to me which may be of interest. The male fox, which is, perhaps, our favorite animal, is one named 'Borestone Sir Robert.' This fox has saved us two litters of pups by his uncanny, almost human instincts. When his first litter was about to be born to his mate, the female fox was frightened away from her nest box and her pups were born out in the snow. The keeper placed the pups back in the nest box and took a desperate chance in order to try and save the pups from being frozen to death. He locked the mother fox in with the pups all night. Under such circumstances a nervous mother will sometimes destroy her pups. However, this did not happen, and the next morning the keeper pulled the slide out of the chute to the box and let the mother out. She



"**PATSY**," a pure bred silver-black fox raised on the Borestone Mountain Fox Ranch, is a very affectionate and playful animal

immediately began to carry out her pups and try to place them in a hole in the snow. 'Sir Robert,' seeming to realize the danger to his offspring, drove her back into the box and tried to keep her there.

"As fast as she carried a pup out, he would carry one back, and he kept this up until he tired her out, got her and all her pups safely back in the box, and stood guard to prevent her from coming out. All of these pups lived.

"The following year, when the same pair were about to have pups again, the female fox seemed to be very nervous about entering the nest boxes. 'Sir Robert' seemed to remember the incident of the previous year, drove her into one of the boxes and kept her there until the pups were born."

"Out of the bowels of the harmless earth"

Uncle Sam—Silver Miner

Did you know that in ancient civilizations silver and gold coins of equal weight were everywhere equal in value? In Japan, so late as the seventeenth century, silver and gold were of equal value

SILVER in all history has been one of the greatest assets of any nation that was fortunate enough to produce it in quantity. Its power in advancing civilization is no less potent than that of gold. The nation that possesses great mines of silver and fails to fully appreciate that the same are a great national resource, to be fostered and protected by all the power the government possesses, must inevitably pay dearly for its lack of foresight. This nation has so failed and has suffered the penalty.

Uncle Sam is the world's greatest silver miner. His mines have produced two and one-half billion ounces—a fifth of the world's production since the discovery of America. From compulsion or lack of comprehension, or a combination of both, he has permitted the precious metal to be discredited and sold to his direct loss in an amount approximating a billion and a quarter of dollars—a sum sufficient to have built three Panama Canals, several trans-continental railroads, a dozen or so concrete highways across the United States, encircled the earth with cables, reclaimed the arid West or numerous other things of similar magnitude. That amount, unfortunately, represents the principal of the loss only, and does not include the earning capacity of that amount of permanent wealth for an average of a score of years. Five billions of dollars will not exceed Uncle Sam's real loss to date, and the damage is a continuing one.

If one is looking for romance, he can find it in the story of silver. Always in the problem of economics, silver has ever been the subject of selfish political manipulation and intrigue. Its tremendous power for good in the world has oft times been minimized, but the truth in respect to silver must ultimately prevail. When the truth does prevail, then silver will take its rightful place, equal to that of gold, in the economic development of the world. When Uncle Sam awakens to a comprehension of the real value to himself and to the world of his silver mines, then he will, because he has the power, make the truth triumphant. It was the great statesman, the late James G. Blaine, speaking of gold and silver in the Senate of the United States, who said:

"The two metals have existed side by side in harmonious, honorable companionship as money, ever since intelligent trade was known among men . . . The dethronement of each has been attempted in turn, and sometimes the dethronement of both, but always in vain."

The single gold standard, forced upon the world for the last time in the seventies by English and German influences for their own peculiar selfish purposes, have prevailed so long that it has become a sort of fetish with many, they know not why. In the greatest crisis in the world's history, the gold standard has failed to function and its failure is written in international exchange. All the gold of all the nations is not sufficient to pay one year's interest on the national debts left as one of the heritages of the world war. The commerce of the world is paralyzed because the money of half the world is so nearly worthless or of such fluctuant value that it scarcely functions as money in international transactions.

Silver was struck down as a money metal

By JUDGE F. H. NORCROSS
of the Supreme Court of Nevada

when its value as compared with gold was unquestioned and when scarcely a decade had elapsed since the fact had been established that Uncle Sam was the possessor of great silver mines and about to reap the benefit of their production. The gold standard was forced on the world by England and Germany, not only closely

would also be the moment of our sorest distress."

"England," said Senator Henry Cabot Lodge in a speech delivered in the Senate, April 6, 1894, "is governed in her attitude towards silver solely by her own interest. She is not engaged in maintaining the gold standard because she is in love with what some persons declare to be an economic truth. She is engaged in maintaining it because her bankers and her capitalists believe it pays. The rest of the world stands either ready or anxious to do something for silver."

Whatever may be said for the gold standard, it cannot be said that it had its inception in any spirit of altruism.

For a score or more of years, Uncle Sam has been supplying forty per cent of the world's silver output. It would seem that he has failed to comprehend the importance of that fact. For a recent illustration—Uncle Sam produced seventy-five million ounces of silver in 1915. That year the ratio of production of silver to gold was the lowest of record—seven to one. With war prices on either products prevailing, Uncle Sam, without protest, permitted British influences to drop the price to the lowest figure in the history of the metal—a price ratio of forty to one. Great Britain needed silver badly for her East Indian Colonies, where it was transferred at a profit of three hundred per cent. Several years later, more silver was required for India than the regular market afforded. Uncle Sam was offered a dollar an ounce for his whole treasury stock. Apparently delighted over the opportunity, he shipped to India nearly three hundred million ounces—all he had. Great Britain only made a trifle less than a hundred million dollars on that deal and still owes for the silver.

For many years, four London brokers, chartered by the Crown, have arbitrarily fixed the price of silver, solely in the interest of a part of the British Empire. Uncle Sam has been treated like a rube playing a shell game at a country fair. That is how he lost his billion and a quarter of dollars and its earning power for all time. It is now of historical interest only, whether the action of Congress in demonetizing silver was deserving of the appellation—"The Crime of '73," whether it was a mere blunder, or whether Uncle Sam was in a situation in which he was forced to follow the lead of then more powerful nations in the financial world. True it is, however, that silver was worth \$1.33 an ounce the world over when the legislation was enacted, and had been substantially of that value for centuries of time. True it is, also, that if that price had been permitted to continue, it would have added billions of dollars to the wealth of this nation.

In so far as the United States may be said to have any declared monetary policy, it is for bimetallism, by international agreement. The Act of Congress of November 1, 1893, over which the last great Congressional battle for silver was fought, contains this declaration:

"It is hereby declared to be the policy of the United States to continue the use of both gold and silver as standard money . . . such equality to be secured by international agreement . . . the efforts of the government should be steadily directed to the establishment of such a safe system of bimetallism as will maintain at all times the equal power of every dollar," etc.

The Act of March 14, 1900, fixing the gold



JUDGE FRANK H. NORCROSS of Reno, Nevada, is a notable ornament to the bar of his native State, having served continuously on the bench of the Supreme Court for twelve years, and as chief justice for five years of that time. As surveyor of Washoe County before beginning the practice of the law, he came in close contact with the silver mining interests for which Nevada is famous, and has always been a proponent of the white metal. His family were among the early settlers of America, his earliest paternal ancestors on this continent being Jeremiah Norcross, a native of England who settled in Watertown, Massachusetts, in the year 1638. His mother was Caroline Sherman, a native of Rhode Island, and while not a direct descendant of the original Roger, was of the same family from whence come other distinguished names in American history. Judge Norcross was elected president of the National Silver League, organized in San Francisco early in April, for strictly non-partisan educational purposes only

following the discovery in the United States of great silver mines, but at a time when this Government was burdened with the debt of the Civil War and absorbed with the problem of reconstruction.

"The German Empire," said Senator Blaine, "passed a law destroying, so far as lay in its power, the value of silver as money. I do not say that it was specially aimed at this country, but it was passed regardless of its effect upon us. . . . Thus, by one move the German Government enhanced consequently the value of gold, and then got into position to draw gold from us at the moment of their need, which

dollar as "the standard unit of value" also provides:

"The provisions of this Act are not intended to preclude the accomplishment of international bimetallism . . . by concurrent action of the leading commercial nations of the world."

As a matter of actual practice Uncle Sam has never been diligent to protect the value of his silver product. His negative attitude has enabled the consumers of silver to fix its price for their own benefit. True, Congress in 1918, passed the Pittman Act providing for the purchase of silver produced in this country at a minimum of One Dollar an ounce, until there is returned to the treasury an amount equal to that sold to Great Britain during the war. The price was fixed by the Act, according to the statement of the Director of the Mint, "to stabilize the price of silver when there were indications of its reaching unheard of heights during the war." At best it is a temporary measure representing no fixed governmental policy. What is essential is a measure which will permanently stabilize the value of silver.

As early as 1836, when the struggling Republic needed all the basic money it could get, Uncle Sam was persuaded somehow to adopt the ratio of 16 to 1, while the European nations coined all the silver they could get at a ratio of 15½ to 1. That fixed the price of silver at \$1.29 an ounce at the United States mints, while it was worth \$1.33 an ounce the world over. Hence, Europe absorbed the silver production of the world including that of the United States and Uncle Sam was left holding the sack.

America is now in the position of the greatest creditor nation of the world. Uncle Sam doesn't have to take the dictation of Europe. He can turn the tables and be the squeezer instead of the squeeze if he wants to be. The world owes him so much money, however, that he is forced to be generous, even if that were not his natural disposition. He has got to re-finance a bankrupt Europe for his own protection. That's the biggest problem he's got right now. Is he going to try to do it on a gold standard, or is he going to insist that his own silver shall help out the situation?

There are about nine billion dollars of gold in money or bullion available as money in all the world. That's about five dollars per capita for the world's population. Assuming there was an equal amount of silver now available (which there is not), it would not make a very large amount of basic money per capita even then. It would have to be augmented by a large amount of paper for the nations to do business. Gold, in fact, will never circulate as money in any country, nor will silver, except in minor coins, outside of the Orient and in portions of the Americas. All the silver that has been produced during the last five hundred years, if it were now available for monetary purposes, would only make about six dollars per capita for the world's population, but seventy per cent of it has been consumed in the arts or lost. Silver answers every requirement as a basic money. True, it is a little more cumbersome than gold, but all the silver that has been produced in the world could be put in one vault thirty feet square. The old "scare cry" about a "flood of silver" was and is a myth. Most of the silver in existence has been produced since the discovery of America, and the total production during all that time bears a ratio to gold, of almost precisely fifteen to one. For many years last past, silver has been produced on a ratio of only about ten to one. It is impossible that there may occur any sudden change in the quantity ratio of the two metals.

Ninety per cent of the silver of the world is produced on the American continent, and about eighty per cent of the amount comes from North America. That is the main reason why European

financiers have been in favor of the gold standard. It was easier to keep the financial center of the world in Europe. America should have something to say in the future about what is to be done with its own product. Mexico, as well as the United States, is a great producer of silver. Mexico is our next-door neighbor. It would be more profitable to this country to have the Mexicans busy mining silver with the aid of American capital than in hatching revolutions.

After England and Germany had forced the world to adopt the gold standard in order to put a crimp in Uncle Sam and deprive him of the great advantage of his recently discovered silver mines, there were spasmodic efforts in this country to restore silver to its historical place as a money metal, but the European money power had then too much of a strangle hold on Uncle Sam. The fight to restore silver culminated in the presidential campaign of 1896. That campaign was an unfortunate occurrence for silver, not because of the result of the election, but because of the false conception engendered in the minds of more than half the American people in respect to one of America's greatest assets.

The issue in that campaign was not a gold standard but as to the method bimetallism should be accomplished whether by the United States alone or by international agreement. The financial interest of the nation, however, became frightened as to what might happen if the United States broke away from the money standard fixed by Europe. Money is the most timid thing on earth. The March hare is as brave as a lion in comparison. The banking and moneyed interests of the United States became frightened for fear the United States alone could not maintain the double standard and disaster might follow. It was deemed necessary to make every kind of extravagant assertion imaginable in order to pass the scare on to the people. Various and numerous were the expressions invented for the occasion—"fifty cent dollar," "dishonest money," "flat money," "intrinsic value," "silver craze," *ad infinitum*. Millions of voters were made to believe that every silver dollar was short fifty per cent in "intrinsic value," and a fraud on the people. It was the poison thus engendered in the minds of the people which was so injurious to silver, resulting in such loss to the nation in general. Thereafter, it was easy for a few London bankers to fix the price on American silver at half or less of its real value.

For decades the price of silver has been fixed utterly regardless of its relative production compared with gold. The silver mining industry has thereby been rendered extremely hazardous and its path strewn with countless disasters. Uncle Sam has shared in every such disaster and his loss can only be expressed in billions.

Uncle Sam as the greatest silver miner in the world ought now to turn over a new leaf, and insist that this great product of his should have fair treatment by the world, himself included. If there were any good reason on earth why he should go on indefinitely losing fifty millions of dollars, or more, annually on his silver production, it would be a different matter. There is no such reason.

Before the war, the world was proceeding mainly on confidence. Uncle Sam, himself, fought the war largely on Federal Reserve notes—Uncle Sam's promises to pay. The people accept Uncle Sam's paper without knowing or caring whether he is prepared to meet it at any given time. That is very properly conceded on faith. This, however, is not true of the paper of other governments. They must have enough gold, or gold and silver, which they have not now, to form a basis for confidence and regulate international exchange.

There is probably only one nation that would now stand out to retain the gold standard—Great Britain. Even the British Empire may see the light differently now, and it is probable that the influence of Canada and Australia would be thrown into the balance for silver. That England should consider that she is still in a position to reap an undue advantage from the gold standard, is no reason why the silver producing nations of the world should not avail themselves of the benefits that would accrue to them by using their silver production to increase their credit and financial power.

If the world again returns to bimetallism, Uncle Sam should insist that the ratio of silver to gold should not be greater than 15½ to 1, which would permanently fix the price of silver at \$1.33 per ounce. If bimetallism is not adopted, Uncle Sam should endeavor to stabilize the price of silver as near that figure as possible. One way in which this might be accomplished, would be to invite all the American silver producing nations to act in concert. Stability in the price of silver is essential to success in the silver mining industry.

Why, some will ask, is the United States as a nation interested in a high valuation for silver, when comparatively few are interested directly in its production? Some foolish ones will say it is an injustice to allow the silver producer so great a price on his product, not comprehending that the nation as a whole prospers in proportion to the value of its mineral products and particularly that of its precious metals, and not comprehending the further fact that great profit in gold or silver mining rarely occurs and that the industry is beset with hazards and disappointments. It is a few capital prizes now and then which makes the industry as a whole run at slight profit or even at a loss.

The discovery of gold in California in 1848, and of silver in Nevada a decade later, made Uncle Sam a real world power and the increasing product of his mines advanced civilization in relative proportion.

Mines which produce silver alone rarely occur. Gold and silver are usually found together, and silver is nearly always found in copper ores, and frequently with lead and other of the base metals. The value of the silver in gold, copper, lead and other ores frequently determines the question whether the mine can be worked at a profit. An increase in the price of silver adds to the permanent wealth and prosperity of the nation and injures no one. John Mackay walked into Virginia City in 1864, with no capital other than health, courage and ability. He left, worth millions, but he took the wealth from Mt. Davidson, not from his fellow men. With that wealth he laid the Pacific cable, and built the Postal Telegraph. Put silver back to the price it held before England and Germany conspired to scuttle Uncle Sam's treasury, and there will be more John Mackays, who will inject some of the elixir of life into the now sluggish veins of Uncle Sam, and awaken him to the realization that he is a great silver miner and responsible to the world as such.

Silver stabilized at \$1.33 an ounce means the discovery of new mines and the profitable working of others long since idle. It means the stimulation of every industry. It means more railroads, more telegraph and cable facilities, more power lines, more ships, more factories, more demand for the products of agriculture and labor. In short, it means an added vitalizing force now needed by this nation and the world. It is now up to Uncle Sam as the world's greatest silver miner to call the nations again into conference to "deliberate anew over the problem which comes down to us from Abraham's time—'the weight of the silver that shall be current money with the merchant.'"

"Where'er we tread, 'tis haunted, holy ground"

The Birthplace of American Independence

*"By the rude bridge that arched the flood,
Their flag to April's breeze unfurled,
Here once the embattl'd farmers stood,
And fired the shot heard round the world."*

PATRIOTISM is an inherent American trait. Yet what man or woman, born in this country and isolated from all influence that would tend to create that feeling for love of country, would not thrill when the Stars and Stripes are flaunted far overhead, and that orderly band of straight soldiers and shiny instruments played its homage to our glorious flag.



Historic Buckman Tavern, Lexington, Massachusetts

The answer to this apparent discrepancy exists in that the Pilgrim Fathers who landed on American shores three hundred years ago, have implanted the seeds of loyalty and patriotism for this country into the hearts of their children; their children, in turn, have by dint of struggles and strife intensified this attitude, and have handed it on through the ages. A thing becomes all the more precious and its value is enhanced a thousand fold if it becomes the cause of just war waged against an enemy; if it becomes the cause of personal sacrifice and general bloodshed.

Lexington, Massachusetts, is one historic village in the United States into which no unpatriotic American will willingly enter. There is obvious there an invisible relic left by those who had brought us civilization in America that, functioning always, kills whatever may be disloyal in a citizen. Probably it is the concurrence in mind, wafted on by this invisible force, of the many struggles and battles that took place on the Common, where heart's blood was delivered unto the enemy in order that Americanization may stand a better chance for development that is responsible for Lexington's "one hundred percent Americanism."

In this most picturesque town there is still existant an old tavern; in fact the oldest of Lexington taverns, built originally by Benjamin Muzzy, who owned the land about the vicinity. In 1693 this man was licensed to keep a public house, and from the first there was hung from over the door of the tavern a hugh sign which read, "Entertainment for man and beast."

History tells us a great deal about the Buckman Tavern that is vitally interesting. It was

more than eighty years before the Battle of Lexington that the Buckman Tavern was built. It served as a "billet" during the Revolutionary War, and many of the British bullets found a target in patriot breasts there on that memorable day, April 19, 1775. It took its lasting name from John Buckman, who was the landlord on that fateful day, April 19, 1775. He was then thirty years of age and a member of Captain Parker's company, although not taking part in the fight on the Common.

To the Buckman Tavern came Paul Revere, after leaving Hancock and Adams, in order to secure a trunkful of papers belonging to Hancock. Looking out of the chamber window and seeing the troops approaching, he made haste to escape, so history relates, passing through the rear of Parker's men, drawn up on Lexington Green. He heard the opening British volley, turned to see the clouds of powder smoke rising above the field, and hastened on his way.

At the back door of the tavern Solomon Brown, a patriot of the tavern, was captured by the British. Soon after his release he took up his post and fired again. The response from the British was immediate. Brown was not struck, but the tavern was badly damaged. Upon the retreat of the British, two wounded soldiers were brought into the house, one of whom died there.

Joshua Simons came into possession of the Buckman Tavern in 1792, and in 1794 he sold

Balls and parties were given here. The house was seldom opened as a public house after 1815.

Outwardly the building is a picturesque example of Colonial architecture, with recessed



Drum beaten at the Battle of Lexington by William Diamond. The long roll on this drum was the first overt act of the Revolution

porch on the first floor, and piazza on the second for the whole breadth of the front, dormer windows on three roof slopes, and the whole topped with two massive chimneys. Stately trees and attractive shrubbery decorate the lawn.



The Battle of Lexington, where was fired "the shot heard round the world"

the tavern to his son-in-law, Rufus Merriam. The latter's business was rather in providing meals than in furnishing lodgings, his customers having been carriage folk—transients and the like.

In 1915 the tavern was purchased by the town of Lexington, and given over to the custody of the Lexington Historical Society. During the World War it was the headquarters of the Red

Cross. On January 21, 1921, it was opened to the public for community purposes by the Buckman Tavern Community Association. Through interlocking executive functions on the part of

the present hipped roof with its attic rooms added.

But if it does not constitute a striking example of fine old work, it does possess some most inter-



Lexington Common and statue of the Minute Men

both organizations as provided by constitution, the control remains in the Lexington Historical Association.

Buckman Tavern is now the place of assembly for the D. A. R., the Minute Men, the Girl Scouts, etc. In it the Children's Museum is housed. It is purposed also to assemble here relics of the country's wars. To museum-lore has been added a collection of precious birds, valued at \$2,500, the donation of Dr. Tilton. This makes it possible for teachers to give bird talks for the benefit of children.

The variety of uses to which this tavern has been put, its longevity of existence, all bespeak the typical New England spirit. It has done service to the Americans for two hundred and twenty-five years, and will undoubtedly continue to do so for many more. Historical societies such as these are doing splendid work in preserving reliquarian constructions. In a measure, that is all we have left to bind the tie between what is old and what is new, what is old-fashioned and what is modern! The results of this work keep alive that deep reverence and worthy sentiment toward the fathers and founders of our country; here we have visible, tangible evidence to handle, to assure ourselves that these men really shed blood for a then invisible race—the future generations. In a word, the preservation of historical places keeps our patriotism and loyalty ever fresh.

Architecturally the Buckman Tavern is not a superlative example of the beauty of Colonial work. It was not planned in its entirety as it is seen now, but, as its frame gives evidence, was originally half the length of the present structure, two stories in front and with a long sloping roof towards the north, what way back in New England the natives called a "back-lintered roof."

Later the front was lengthened to its present dimensions by a two-story addition with a separate cellar under it, the only access to which was by means of a bulkhead and outside steps on the rear.

At a still later date, as is indicated by the fact that the old outside cellar entrance was never removed, but was left remaining where it may be seen today underneath the floor, the rear corner was built in, completing the square, and

interesting features, and, with the Hancock-Clarke House and the Munroe Tavern, make up a trinity of old historic buildings the like of which few other towns can boast.

While engaged in the restoration of the old fireplace in the room to the right of the entrance hall, when the modern tiled fireplace had been removed, it was found it had been built within an earlier fireplace some five feet wide, which in turn was built within the original fireplace. Above the old chestnut header was still the original plastered brick wall; so that while it meant finding and putting in place a longer header to span the entire distance (meanwhile holding up the crumbling super-structure) the task, though requiring careful and cautious work, did not seem to present too great difficulties. But when examination of the old plastered surface brought to light in addition to certain apparently youthful attempts at portraiture, the clear cut impression of the name "J. P. MERIAM" which could have been made in no other way than by pressing a burning iron against the fresh plaster (the iron used, by the way, was later discovered in the Tavern) and when it was recalled that J. P. Meriam was not born until July 4th, 1791, it became evident that this could not have been the original plastered wall above the original fireplace; and a closer examination revealed the fact that at the time of building this second fireplace, the whole chimney had been brought forward a foot. By leaving undisturbed this new chimney, the restored fireplace would not only have been a foot deeper than was that of Buckman's time but would have been flush with the wall instead of being recessed, as was the original. So much work had already been done that it seemed best to continue and restore the old fireplace exactly as it was when Captain Parker and his men warmed themselves before it in 1775. From the boards on which rested the old header and

which were found to be still built into the masonry in their old location, as well as by the jointing of the brickwork, the exact size and location of this huge stick could be seen, and by rare good fortune, a similar old hand-hewn stick was secured from an old barn in North Lexington.

Enough of the old brickwork remained to give the lines of the original face of the chimney with its arch at the ceiling, the curve of which was verified by the cutting of the laths on the end wall next the old kitchen which had been built up to the chimney. The interior of the fireplace is as it was, save that some of the bricks in the herringbone panel at the centre were so badly disintegrated that it was necessary to renew them. The lower courses, however, are the original old brick.

In the upper flue remain the old holes at either end into which green sticks were inserted on which rested a longer one running lengthwise and from which were hung the pots and kettles over the fire. Indeed, in one of these holes can still be seen the end of one of these old sticks which ran through from the fireplace in the West Room.

Behind the fireplace in the front West Room was originally another of the same size as that restored. Owing to the very radical changes made in the chimney, presumably by Meriam, it was found impossible to restore this to its former condition, but a hinged panel shows the old header and early brickwork, while access has been left whereby those interested may see the lines of the early fireplace itself. In this room, too, the early wainscot and finish about the windows has been restored. The stairs have been untouched, though traces have been uncovered showing that originally their position was the reverse of the present arrangement.

In the old Ball Room the line of closets that had been put up after the death of Eliza Meriam was removed, revealing the old panelled partition so constructed as to be removable when it was desired to throw the two rooms into one. After some search and study traces of turnbuttons, hinges, and bolts were discovered, and the method by which this partition was set up and held in place was ascertained.

A portion of the old outside wall with its covering of early wall paper was disclosed on the removal of the closets; and it was also found that the panel work above the rear fireplace had been plastered over.

Fourth of July, Decoration Day, Labor Day, Washington's Birthday—they are all holidays



Boulder marking the line of battle

celebrated nationally. Patriot's Day, while it brings only localized response and enthusiasm and celebration, encompassing in its observation only the New England states, it is nevertheless looked upon with so much interest and anticipation by the "Yankees" (Continued on page 28)

"Architecture is but frozen music"

Where Conscious Stones to Beauty Grow

"They build too low who build beneath the stars," J. Harold MacDowell said to his soul, and straightway he set dumb stones and steel to music

LIKE Ralph Adams Cram, of whom it is said that no bigger church architect has lived since the Middle Ages, and who always maintained that, "for him no better critic ever existed than his own mother," J. Harold MacDowell, acoustical expert, feels that he owes the greater part, if not all, of his success to his mother.

Unlike only too many contemporary successes today, "Mother's Day" is honored oftener than once a year by Mr. MacDowell. His mother's

was to build churches, residences and auditoriums. So, courage being given him by mere anticipation, he braved his father's displeasure and in his eighteenth year made the trip to the Canadian northwest.

A wide and unusual variety of experiences leaped at Mr. MacDowell here. In his quest for knowledge as to where and how to "become an architect," he passed through a number of extraordinary adventures, most of them totally irrelevant to the pursuit of mechanical drawing or architectural knowledge. His ingenious ability in turning every disadvantage into a distinct advantage, was clearly indicative of an inventive make-up whose concrete base was certainly self-reliance.

When he arrived at Alberta, Canada, Mr. MacDowell found himself the voluntary owner of a hundred head of steers. He had purchased them as more or less of a lark, but summer having passed, he found himself unable to sell them, and equally unable to house them. He had refused an early offer, thinking he could strike a better bargain later. By the middle of fall, he was exactly five years wiser than he was in the summer of that same year. His father having partly financed the project, its success was more or less of a serious problem with the young cattle owner.

A happy solution however, soon presented itself to the embarrassing problem. The owner of the herd concluded that so long as no purchaser apparently wanted his cattle *en masse* and intact, he would settle in Alberta for the winter and sell them piece by piece. He optimistically opened up the first and only meat-market in the pleasant little village of Alberta,

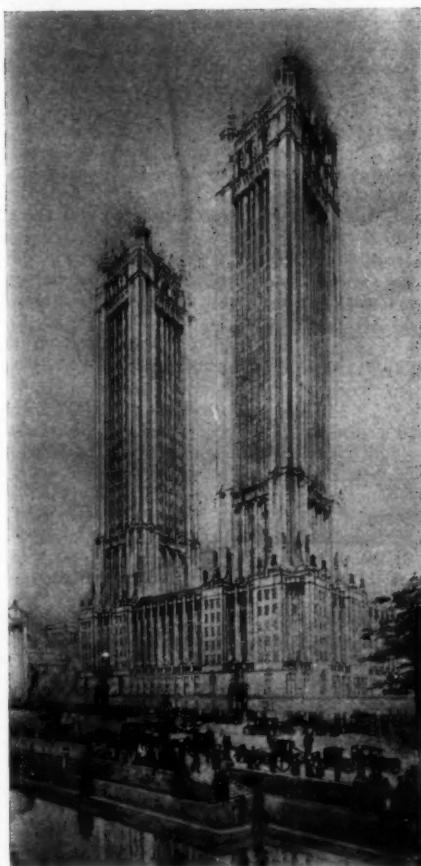
thereby giving all his cattle secure homes in the way of porterhouse and sirloin steaks.

This method of disposing of his troublesome animals was slow in process, but Mr. MacDowell at least realized a return on his investment. In the Spring, business having boomed all winter, he wrapped up the last hindquarter of his very last steer, and found himself with not only his pockets comfortably padded, but a customer as well, who was willing to buy out his business.

Mr. MacDowell proved to be only another one of that "army of a sturdy million" at the McGill University in Montreal, Canada, who worked their way through college, looking well to the penny, and to those class standards, which were to decide for him, whether he would "make the grade" or not. His evenings and week-ends belonged to anyone considerate and generous enough to give him work. He cleared up anything that might stray his way, regardless of the nature of the work, stipulating that it be honest and fair work. He paid for his courses with money earned installing electric bells in residences, oiling sewing-machines in tailor shops, and other work of that nature.

Mr. MacDowell was twenty-three when he successfully passed his examinations at college and became a member of the Royal Architectural Institute of Canada,—one of its youngest. His conclusion that this honor would bring him little financial aid was sensible enough, yet the architectural firm in Alberta who employed him gave him nine dollars every week. But it was a job, and one which started him off on work he intended should be his vocation.

While with this firm, Mr. MacDowell was assigned his first "blue-print" job by a private

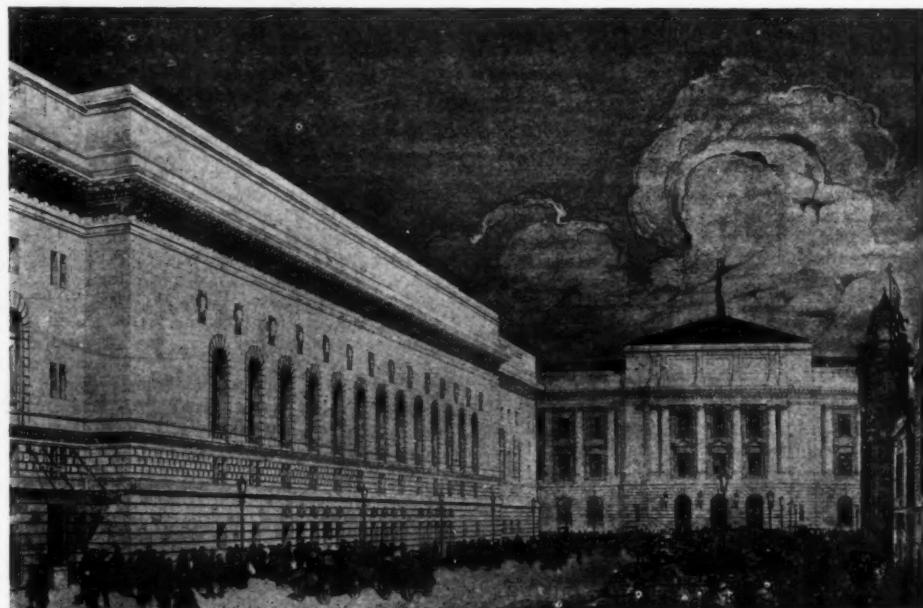


DESIGN for municipal building by J. Harold MacDowell, which won first prize in Chicago competition

counsel, which as a child, he remembered listening to, was a blessing at home, and a benediction that accompanied him wherever he travelled. Just four words they were: "Be honest with thyself!"

Born in Quebec, Canada, of parents who desired that their only son should take to the plough and the field, this son, while still very young, was made to consider himself a rebel, for he had already determined that he would be anything but a farmer.

Shortly after this declaration of independence, young MacDowell decided consistently that he



THE auditorium at Cleveland, Ohio, a mammoth structure costing over \$8,000,000, the largest one-room enclosure in the United States (seating fourteen thousand people) is a monument to Mr. MacDowell's theories of acoustical architecture

party who wanted a garage and sales office building constructed. His first client was possessed of some philanthropic motives.

Every evening was spent on this student's tall chair now, and we surmise that his first set of plans turned out successfully and satisfactorily, for the buildings were constructed à la specific plans.

From this point (he was now twenty-six), Mr. MacDowell seemed to have forged ahead rapidly, albeit those beginner's problems which every young and ambitious person looks upon frowningly, as serious set-backs, seem to have clouded his sky as well.

There were, however, many bitter disappointments—some arising because of an unwisely chosen partner (into the organization of his own firm) neglecting important business issues. Certain mental and physical burdens which followed soon after this disappointment, were responsible for a state of health that obliged Mr. MacDowell to seek respite for a short time.

Three months rest brought him back into the swivel chair again, and to an acceptance of the direction of certain large buildings for the Canadian Pacific Railway.

Mr. MacDowell was again forced to attend to his health, his final decision to leave Canada for New York in the fall of 1912 brought him that reward for which he worked so hard ever since entering college.

Mr. MacDowell is considered by many to be a contemporary of the late Professor Sabine of Harvard University, insofar as acoustical architecture is concerned. His work in the design of public house buildings and theatres throughout New England and Canada was given recognition early in his career. A member of the American Institute of Architects, of the Boston Society of Architects, and of the Cleveland Chapter of the A. I. A., Mr. MacDowell enjoys the prestige due a man who has succeeded in his work because he worked unaided for success.

What acoustical theories Mr. MacDowell

owned, were put to practical test in the construction of the City of Cleveland's auditorium, a mammoth structure costing over \$8,000,000,



CITY Architect J. Harold MacDowell, of Cleveland, Ohio, member of the American Institute of Architects, of the Boston Society of Architects, and of the Cleveland Chapter of the A. I. A., who enjoys a high prestige attained through his work in the designing of public buildings and theatres throughout New England and Canada

and known as the largest one-room enclosure (it seats fourteen thousand people) in the entire United States. The design and construction of this building had already begun, and when the mayor of Cleveland requested this architect to take charge of the work, the latter found its design to be acoustically faulty. Practically the entire interior was re-designed.

Mr. MacDowell's hobby is curious, lucrative and ingenious. He at one time fell heir to a moving-picture machine, and whenever business is dull, he makes good use of it. Employing two stars, a young man and a woman, he registered a certain film length of an elopement they effected. He then took them into some small town's general merchandise store, and there had them purchase what household goods newlyweds would be likely to need. While there, he would photograph as many of the townsfolk as would congregate in the store at the time. He then developed his film, retaining only the first part, viz., the elopement, and selling to the town where the picture was filmed, the last part, wherein was photographed the department store with its people, at a price of \$500.

Then this architect-picture-magnate would move to the next small town, with his moving-picture outfit slung over his shoulders, and there repeat the performance.

At every town he would find a ready sale for his film, for naturally people desired to see themselves in "movies."

Everything was "grist" for Mr. MacDowell's mill. He will tell you that "work is liberty!" and you will agree with him, for he tackles it with such an attitude of being privileged to do so, that one wonders why we tolerate the shirker at all.

To him, his mother is his "best friend." He is the sort of man who is as proud of her and devoted to her, as though he himself had chosen her.

. . . and from what we glean from the story, he deserves her.



The Birthplace of American Independence

Continued from page 26

that it more than equals these other holidays in their importance.

Lexington particularly puts forth unlimited efforts in staging suitable celebration, in donning suitable dress-wear for the entire town, and in displaying suitable and an immense amount of bunting to decorate its shop windows and homes. There is nothing artificial or affected about the patriotism felt by Lexingtonites. It is not difficult for them to arouse that glorious feeling of patriotic enthusiasm on Patriot's Day, with so much *prima facie* evidence about and around them—evidence that is ever ready to bring about automatic reproach and condemnation to those displaying disloyalty or laxness.

In the town hall of Lexington, then, on April 19, a full house awaited the speaker of the evening, who was added to a rather "fat" program in celebrating Patriot's Day.

The typical sweet-faced old lady was there with her kindly-featured, white-bearded escort. Hugging the balcony rail was, of course, the usual array of small fry, all agog with anticipation, ready to join their treble voices with the wild, tumultuous applause given in tribute as George Washington's name, coupled with that

of President Harding and perhaps Abe Lincoln, would ring out from the rostrum.

Community singing held full sway, a prelude to the exercises which commemorated the event, following Paul Revere's famous ride. The president of the Lexington Historical Society presided and introduced the speaker, Mr. Joe Mitchell Chapple, lecturer and editor of the NATIONAL.

"Seven score and five years ago, a memorable date was recorded in history," the speaker began. With flowers of rhetoric and poetic similes, he proceeded to speak of the shot fired on Lexington Green—the heritage of patriotism, which Patriot's Day made vivid—the words of holy writ that came to his mind when he first heard, at his mother's knee, the story of the Minute Men at Lexington.

Referring to the battlefield near, with the threshold of the hall as a shrine of the new republic, where American blood was poured, a sacrificial offering that we might live, Mr. Chapple said it was proper to glory in the memories of those patriots, "but more important to live and prove worthy the inheritance."

In graphic language he contrasted the strenuous and simple lives of our Revolutionary an-

cestors, brightened by homely and rational pastimes, with the selfish, class differences and social antagonisms, attended with riot of self-indulgence and blight of indifference to serious matters, which today characterize society at large. Thence he drove into the realm of great personalities of past and present, where he is probably more at home than any platform orator of this generation.

Washington, Revere, Lincoln, Grant, Lee, were names he flashed on the mental screen, awakening a patriotic flame that flickers latently in the recesses of every American heart. Then from his own personal intercourse he produced an eloquent character sketch of President Harding—a man of prayer, a man of duty, a man of uncommon sense, a man who venerated his mother and loves flowers.

Lexington might well be classified as an American shrine where Americanism is placed before that of any other sentiment where, with even the "shrewd Yankee," his flag always comes first and foremost.

The trees on Lexington Green, in honor of the boys who fell in France, will be God's living monuments, for only "God can make a tree."

Alien infiltration spelt the downfall of all ancient civilizations

Who's to Own America?

Congressman John L. Cable of Ohio considers immigration by far the greatest question now confronting the American people, and the most serious problem demanding solution by the American government

NATIONAL necessity requires that the doors to our country be closed to immigrants for some time to come. The pressing problem of a new immigration law is now before Congress and the nation, for the so-called three per cent restrictive law will have become a dead letter after June 30 of this year.

The immigration question concerns solely the United States and the country from which the immigrants come. No other nation can legislate concerning them. We have passed the point of assimilation, and so all immigration should be suspended except under two conditions: First, where comity between countries does not permit it; and second, in the case of near-blood relatives of citizens or declarants of this country.

The new law should permit the father, mother, brother, sister, wife, husband, or children of an American or even an alien who has resided within this country for at least a year, and who has declared his intention of becoming a citizen, to be admitted subject to the provision that the three per cent limitation is still retained, making it applicable to such relatives.

At the end of this fiscal year it is estimated that two hundred and fifty thousand immigrants will have come to this country, transported almost entirely in foreign ships. We have now one of the largest merchant marines in the world, and our interest in the immigrants is at least fifty per cent, so at least half of them should come to America in American ships. This would create, without expense to the taxpayers, a substantial subsidy for our ships. Selective tests of admission can be made at embarkation points and on board the ships.

The problems given above are those with which we will have to contend in drafting our new immigration law, but let us delve slightly into the workings of the present three per cent measure.

The operation of the law, which went into effect on June 3, 1921, can best be illustrated by the story of Leonidas Papacopoulos, who came to this country from Turkey on the steamship *Constantinople* that steamed its way through the great gateway of America and docked at Ellis Island on January 3, 1922. He was a young man whose parents both resided in Constantinople, and whose uncle in Canada had paid his passage to this country. Leonidas found, when he reached the Island, that we had a law providing in brief that new immigrants equal in number to only three per cent of those foreign-born nationals who resided in the United States as determined by our 1910 census could be admitted during this fiscal year, and that not more than twenty per cent of the quota was admissible in any one month. For Turkey three per cent equalled 653. The same rule applied to all other countries. For example, the quota for Belgium was 1,557; for Denmark, 5,644; for France, 5,692; and for Luxembourg but 92.

Comity between our country and others requires, however, that some persons be exempted from this count. If we bar certain classes, then our people likewise might be barred from other countries. Government officials and their families, aliens visiting the United States as tourists or temporarily for business or pleasure, aliens who have resided continually for at least one year immediately preceding the time of their entrance

By HON. JOHN L. CABLE

to the United States, in other countries of North, Central, and South America, or adjacent islands, and aliens under the age of eighteen years who are children of citizens of the United States, are admitted without numerical restriction.

The three per cent law is in addition to all other immigration laws, and, therefore, those who are



HON. JOHN L. CABLE

The second Republican to be elected as Representative from the Fourth District of Ohio

permitted to enter must also pass all the other selective immigration tests.

The immigration officials, when they came to the case of Leonidas, found that the number of nationals that had already come from Turkey equalled the total quota. He, therefore, not being in the exempted class or the class entitled to a preference, was not admitted, and the officials sent him back with shattered hopes to his parents in Constantinople.

The case of Miss Carmelia Populo had a happier ending. She came to America on the steamship *Providence* and arrived at Ellis Island on December 28, 1921. Her fiance awaited her in this country. He was a naturalized citizen and an ex-service man. She also had a brother and an uncle in this country. Under the three per cent law she, therefore, being the sister of a citizen of the United States and also the fiancee of another citizen, was entitled to a preference. The quota from her country, however, had been exhausted, and, therefore, the preference provision of the law could not assist her, as it applies only when the officials are making selection from a group, the total number of whom are not admissible. The immigration officials, however, permitted her to be married on Ellis Island. By virtue of her marriage she automatically

became an American citizen, and was, therefore, admitted to this country.

In cases of extreme hardship the immigrant has been admitted temporarily under bond. The number thus far to be so admitted in excess of the quota is a very small per cent of the total number legally admitted. Under the present law 355,823 are admissible during the fiscal year. Up to January 25 but 187,129 had been admitted. There remain but five months in which the balance can come. Less than twenty per cent of the quota from Germany has arrived. Approximately a third from Russia, and one-third only from the United Kingdom. The balance of these three quotas equals approximately 125,000.

It is, therefore, obvious that certain countries have put a ban on immigration and that the total number who will arrive in this country for the fiscal year will not exceed 250,000. In the year before the present law went into effect over 800,000 came to this country. Before the war the number rose in one year to over a million two hundred thousand. The law, which is a restrictive measure, therefore, is a success.

Europe today is passing through a serious reconstruction period. Evidence was introduced before the Immigration Committee of the House to the effect that thousands of people in Europe are desirous of coming to America. Ships of almost unlimited capacity are available to bring them over. Friends or relatives will, where needed, advance the necessary passage money. A conservative estimate, in my opinion, would be that a million and a half immigrants would have come to this country during the fiscal year but for the three per cent law. The law is not perfect, but it accomplished its main purpose.

Any law restricting the free flow of people will cause some hardships. To send a man back to his country after he has completed the long journey to America is bound to meet with some criticism. An attack is being made upon the law, chiefly by those who favor unlimited immigration, and stories of separation causing hardships to families are given unlimited publicity, all in the hope that Congress will enact a more liberal law. We should, however, consider that the separation of the families occurred in Europe by the families themselves, and not by the action of our law.

The primary duty of Congress is to legislate for the American people. A million and a half additional people coming to our country during this fiscal year would have worked a hardship upon our countrymen under present conditions. A stranger in a strange land, speaking a strange tongue, without work and without means, would suffer a great hardship. The law, therefore, is not entirely without benefit to some countries of Europe. The would-be immigrant retains his home. Families are not separated. Restricted immigration assists economic conditions in adjusting themselves. The price of a steamship ticket, in some cases, would have procured a small home and some land. If industrial conditions can be settled in Europe by having the immigrant know that he cannot come to America, and must turn his thoughts, his energy, and action to the improvement of his condition in Europe, can it be said that the law is not a success?

"Hail! thou, land of the setting sun"

Out Where the West Begins

Lo! the poor Indian, last remaining reminder of the rare romantic days when the western pioneers conquered a priceless empire

THE country storekeeper has the rest of the world beaten for facilities in prognosticating the coming of Spring. He need not read up on the weather market. The first gay-eyed robin has no message for him; not even the buttercups, although the children may pick them on their way home from school, as early as February.

This proprietor-lord of rurality, in that portion of our grand and glorious land best known as "out West," is impervious to so-called weather tips. When, some morning, he opens up for business and looks out of the front door to see a cloud of dust swirling about, in the distance, and then from out of this dust-cloud emerges a string of light wagons, followed by several loose cayuses and dogs, he knows that the winter is a thing of the past.

* * *

The Indian is on the move! With the first breath of genuine spring, he takes down his smoke-stained teepee, loads his family and other earthly possessions into wagons, rounds up his cayuses, and "hits the trail." He leaves his own reservation to visit on others; it is all around a general change of abiding places, during the warm weather. He generally visits and wanders at will, although occasionally some of his brothers will concede to chop a cord of wood or two.

The Indians are undoubtedly the most interesting patrons of the western country store. Especially is this true of the older specimen, who have not fallen prey to modern custom. This almost extinct race still smoke Union Leader and Peerless in villainous-looking pipes, instead of the cigarettes; they still yearn for a bottle of vanilla extract now and then, and wistfully scan the shelves containing a mixed assortment of patent medicines, linseed oil, horse liniment, and so forth, to see, if by some great and happy chance, there is something drinkable. Pop is always to be had, but picture an Indian warrior, feathered or without, drinking pop! What a spectacle!

Sometimes one of them is seized right at the threshold with severe cramps, and he doubles up in apparent agony. This performance is passed up in stony indifference by his squaw; she usually utilizes the impromptu recess looking over the notions until the spell passes. This last occurrence takes place as soon as the victim realizes that the only remedy on hand is well water.

* * *

Around the vicinity of the waist-line is worn a sort of discarded rag (this on the part of the squaw). Sometimes this rag is promoted to that of a head-dress. White women wear furs all summer; squaws seldom discard their gay-hued blankets the year round. They are all sisters, under the skin.

The young Indians of both sexes show emphatic signs of modernity. The young bucks smoke cigarettes, while some of the girls wear French-heeled shoes, dismal-looking georgette waists, necklaces and many finger rings.

Some of the reservations are inhabited by well-to-do, and they own very fine farms and homes, driving big cars about. When they arrive at this stage, however, they are no longer picturesque.

By AVONIA BAYE

Two old bronzed, withered women, known to the writer, have gone over the trail, between the Spokane and the Coeur d'Alene reservations, for several years. They have all the ear marks of emancipated females, for they have no male hanger-on to wait on. One of the pair, the more sad-looking of the two, occasionally, if unconsciously, admits that memory of old romances has not entirely died within her.

One day, in lugubrious tones, and with an expression that a movie queen in emotional parts might well envy, she said, "No man. Me no man!" Holding up two fingers, parts of an extremely soiled fist, she resumed in the same graveyard monotone: "Two I had; no man now!" With which she faded out of the doorway and joined her lady friend, who sat in the wagon awaiting her, with true Indian patience.

One old fellow, a Coeur D'Alene, who has since been gathered to his fathers, led a free and untrammeled life, riding from one reservation to another, on his little pony. He leased his land to a white man for rent in cash, so he toiled not; neither did he worry. The country store always had a call from him, coming or going, and it was always a receptive audience when allowed to look into this Indian's past. Over a lunch of sardines and crackers would he create recreation for all present.

It is true he asked more personal questions than is considered the thing in polite society. After he had asked your age, your matrimonial state, size of your family, your financial condition, and a few other like queries, however, he was perfectly willing to answer any question that might be put to him. He volunteered the information that he was married once, long ago, before licenses were in vogue, and that "friend wife" was far, far away.

* * *

He was a good scout while alive, but he was the best ever after he took his departure for the happy hunting ground. By the simple process of dying he brought untold pleasure to many hearts, for at his funeral many Indians traveled from the Colville, the Spokane, and the Flathead reservations to be present at the "feast." It was the finest and most enjoyable affair that had ever been pulled off! Evidently his life was as necessary to the pleasure of his fellow-tribe as was his death, for had he not lived, he would not have died and so create recreation for his many "mourners."

The Indian is rapidly dissolving into thin air, however. Just as certain as the automobiles are succeeding in putting the small country stores out of commission, so civilization is wiping out the red man. The world must move on, it is true, but we shall surely miss them once they are gone.

* * *

Running a country store is a great cinch. If you do not believe it, ask any one in the vicinity near one. As for advice, the proprietor never runs out of that, and it is entirely free and unsolicited. He need never post current prices, for any of his customers are ready and glad at all times to tell him what his goods are worth,

and what the same things sell for in town (always is the balance in favor of town quotations).

It is interesting to listen to tales of the peculiarities of a customer's predecessor.

A man really needs little equipment other than two good ears and a dumb tongue. His place of business is a cross between a confessional and an information bureau. All he has to do is to please every member of every family within a radius of several hundred miles.

Once in a while, however, we find a soul brave enough to run things after his own system. This rare specimen contributes in a way towards keeping this old world from falling into the slough of despond.

Twenty miles or so, northwest of Spokane, off the highway, nestled among the pines on an unfrequented road is a little store run by one Billy Taylor. (This, of course, is not his name.) Billy is a bachelor, but he has one love, and she receives all of his attentions and most of his time. Her nickname is Tin Lizzie. Some day, if you happen along that way and Lizzie is in good humor with nothing troubling Billy either, you may be able to buy a can of tobacco, a package of Copenhagen, or a bottle of pop. Unless you have a full tank of gas, however, don't ever show your face inside of his store, especially if you happen to be calling on some one in the neighborhood at whom he has been peeved for some time. You may have a long walk awaiting you if you do.

* * *

One young man had an unhappy experience in this line. He paid a Sunday afternoon call in the vicinity, and when he began to make his preparations for departure, found he had overlooked that rather essential item of a plenty of gas. Over to Billy's he hied. Billy was a little grouchy at being disturbed on Sunday anyhow, so he froze to the dignity of a general in the German ex-army when he learned where the gas seeker had been entertained.

There was absolutely nothing doing after that. Billy was "mad" at these people, and he was not to be moved, even though the young man voiced his plea in two separate and distinct languages, not including the "safety language."

It was a long walk home, which didn't exactly improve the temper of this unfortunate man. Billy, on the other hand, mentally patted himself on the back and resumed his Sunday meditations with the virtuous satisfaction of having lived up to his principles, whatever they happened to be!

When the roads are bad, making it difficult to guess just when Bill can get to town to stock up, he refuses to sell down very close, because he does not want his stock to run down. Do you get the point? If you do, you have his customers beaten a mile!

That is an infinitesimal part of the land we call "out West." Changes are ever occurring, bringing with them heart-pangs, and oftentimes little compensation.

"To wipe out the Indian" is the unspoken desire of many, but to us who know and have known all of our lives, the red man of the West, it is a matter of warm sentiment. He has proved not only a friend, but a loyal citizen as well!

Labrador claims him for her own again

Exploring With a Flying Boat

Dillon Wallace, who wrote "The Lure of the Labrador Wild" and "The Long Labrador Trail," once again will brave the dangers of exploration in the far interior on this bleak and little-known land

DILLON WALLACE, traveler and author, who has made three pilgrimages into the bleak vastness of Labrador, and who wrote (after his first trip) "The Lure of the Labrador Wild," has again felt the lure he describes in his book and is planning to make another exploration through the interior of the huge peninsula. This time he will go in a hydroplane, which will enable him to make the journey to and from the North much quicker, and will also afford a better mode of travel, at the proper season, in the unmapped expanses and barrens of the Labrador plateaus. Wallace plans to make the trip during the summer months, the most favorable for far northern exploits, and will go next summer or the summer following. Heretofore the difficult and infrequent means of travel to the frigid zone has made it impossible for one to spend any considerable time in the interior of the peninsula and get out in time to make ship returning to civilization the same season. The aeroboot, Wallace is confident, will overcome this problem and will make it possible to escape the winter imprisonment.

The interior of the region to be visited, which lies in the Ungava district, north and northwest of the Grand River, is dotted with lakes of moderate size, and there are numerous large rivers flowing west into the Hudson Bay, and north into the Hudson Strait. These tracts of water will afford a safe and wide course for a flying boat during the open season. By following the rivers and lakes it will be possible to cross the interior from the Gulf of St. Lawrence to Ungava Bay and the Hudson Strait, or westward to Hudson Bay. Judge William J. Malone, of Bristol, Connecticut, who accompanied Wallace on his third excursion to Labrador in 1913, will be his companion on the coming flight. The trip will be attempted between early July and late September, the aim being to get in at the first thaw and get out before the first freeze.

Mr. Wallace has had a remarkable career, filled with adventure and the necessity of making his own way on strange paths from boyhood. He has ever been a fervid lover of the open, with an eagerness to pursue strange trails. As a lad of nine he carried an old shot gun and tramped the fields and woodlands near his home on hunts with his grandfather. Hence it is not surprising that, although he is on the threshold of sixty, Mr. Wallace is eagerly planning an aerial expedition to the near-Arctic.

Wallace was born at Craigsville, Orange County, New York, in 1863. His father was a teacher, later becoming a journalist and finally a lawyer and insurance man. He served on the staff of the New York Tribune in his early life and became a close friend of Horace Greeley. Before Dillon had completed the elementary schools his father lost the competence that he had accumulated and died soon after, leaving the boy to make his own way. The first

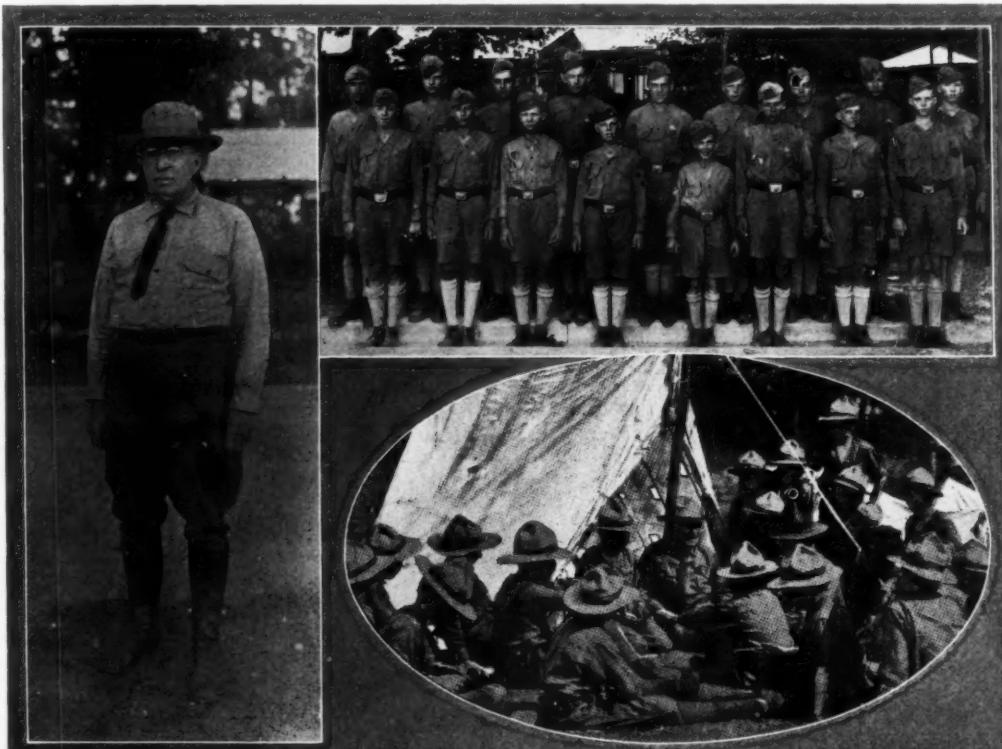
By EARLE V. HITCH

opportunity presented was a chance to learn the miller's trade and this the lad seized. Although he was forced to leave school, he did not discontinue his studies. He grappled with algebra and grammar and followed his lessons diligently. It was his habit to fill up the hoppers and then study while the grain was being ground. As he grew older he became interested in telegraphy and went into that with the same application he had shown in studying academic subjects. At twenty he got a job as telegrapher on a New York railroad. His first assignment was a lonely station, and he found more leisure time than he had at the mill. This was to his liking, as it gave him opportunity to further satisfy his appetite for learning. He bought the best text-books available and without teacher or help of any kind took up the study of Latin and Greek.

In the telegrapher's shanty he learned to read "Aesop's Fables" in the original and subsequently he mastered college Latin. Mathematics he also undertook without an instructor, and by heroic wrestling with that and other subjects he prepared himself for a law course and

passed the entrance examinations of the New York Law School. With his savings, and by continuing work in clerical capacities, he financed his way through law school and was graduated from the institution with the degree of bachelor of laws and was admitted to the New York bar. Some time later he began the practice of law at 62 William Street, and in that office he was associated with Colonel Asa Bird Gardiner, General James M. Varnum and Bainbridge Colby, afterward Mr. Wilson's secretary of state. Wallace's essay into the legal profession gave him freedom from daily routine and he began to renew his pilgrimages into the woods. The appeal of the open trail grew stronger, and at every opportunity he sallied forth on jaunts into the New York and New England countryside. About this time he met Leonidas Hubbard, Jr., then assistant-editor of *Outing Magazine*, in association with Caspar Whitney, the editor-in-chief. They became fast friends. Together they made many hunting and camping trips, and on one of these trips planned an adventurous journey of exploration, with Labrador as their objective.

About a year later all arrangements were completed, and in 1903, with a Cree Indian from the Hudson Bay country as camp assistant and burden bearer, they sailed for the upper shores



Dillon Wallace, writer and explorer. (Upper right) The non-commissioned officers of the Culver Woodcraft School picked by Wallace to serve on his staff at the woodcraft camp, where four hundred such boys were trained last summer. (Lower right) "The Chief," as Wallace is known to his boys, surrounded in front of his tent, where he is telling a tale of adventure. This tent is the one Wallace used as a shelter on his first trip to Labrador and is one of the treasures of the camp museum.

of the Labrador peninsula. They arrived in a bad season. The winter had been unusually severe and the game had migrated. They had to make their own trails through a region no white man had ever before trod, and they found the going hard and progress exceedingly slow. Winter overtook them on the trail in the interior and sustaining life became a daily problem. In a retreat of terrible hardships and privations, from the interior towards the coastal settlements, Hubbard's strength gave out and he collapsed. When this occurred the party had reached a point within eighty miles of a Hudson's Bay

enough to regain his feet, he discovered that he would have to learn to walk again.

The trappers who rescued Wallace discovered Hubbard's dead body and raised it on a platform of poles where it would be safe from wolves and foxes. While still confined to his bed, Wallace arranged for a party of half-breed trappers, with the Indian as guide, to go back over the trail and recover Hubbard's body. They succeeded in locating it and brought it to the post. When Wallace had sufficiently regained his strength he secured dogs and sledge, and with the body in a rough spruce box lashed to the sledge, set out

over the ice for Cape Charles, three hundred and twenty-five miles away. At Cape Charles he took the body aboard the whaling steamer *Aurora*, and brought it back to the United States, arriving in the spring of 1904.

The next year Wallace spent at home, occupying himself mainly with writing a narrative of his adventure, which he entitled "The Lure of the Labrador Wild." This was published in February, 1905, and in May of the same year he sailed again for Labrador to renew the effort at exploration. His party was made up of George M. Richards, as geologist, now a successful and well-known mining engineer; Clifford H. Easton, a young forestry student, as botanist; Leigh Stanton, a lumberman, as general helper; and Peter Stevens, a full-blood Ojibway Indian, as hunter. On the fourth day of September the party separated on the interior plateau, Richards and Stanton, with the Indian, to guide them, returned to civilization with maps and collections made by the ex-

pedition, while Wallace, with Easton as his only companion, pushed northward into the great barrens, with five hundred miles of unknown country still before him.

One of his objects was to find the source of the George River. He discovered it in a tiny brook on the Northern Divide and followed it to its mighty mouth on Hudson Strait. In the white water of a wild rapid of the river, on the voyage to its mouth, Wallace's canoe struck a submerged rock and overturned. His guns and all equipment were lost except his small tent and a sheath and a jackknife. He and Easton recovered the canoe and paddles, and on October 16, on the eve of a northern blizzard, they reached a Hudson's Bay post near the mouth of the stream. Thence in open boat, and with dogs, they traveled to Fort Chimo, one hundred and fifty miles to the westward. From that point, on January 2, 1906, in a temperature of 50 degrees below zero, Wallace set out for civilization with dog sledge and snowshoes. He traveled with Eskimos and built snow igloos for shelter as he advanced. In May he reached the States, having traveled in the course of the year nearly one thousand miles in canoe and upwards of two thousand miles with dogs and snowshoes.

The excellent botanical collection of this expedition is now in the New York Botanical Gardens, and Columbia University published a pamphlet on the geological work accomplished.

Wallace, before doing any further traveling, wrote "The Long Labrador Trail," the narrative of his second expedition. In 1907 he saddled a horse and rode into the Sierra Madre Mountains and over a considerable section of western Mex-

ico. In 1910 he spent much time with the Indian tribes of the Southwest and West, living for a time with the Apaches and later with the Hopis and Navajos. Generally traveling alone, with no other companion than his saddle and pack horses, he rode through Arizona, Utah, Idaho, Wyoming, and Montana.

In 1913 he heard the call of the North again, and once more set his course toward Labrador, this time in company with Judge William J. Malone. They explored the lower Beaver River, and marked the place where Hubbard had died ten years before.

Two years previous Wallace had become interested in the Boy Scout movement, which was then beginning to attract attention, and the year preceding his last expedition to Labrador he had organized and conducted a Scout camp. Consequently, on returning from Labrador with Judge Malone, he became active in advancing the Scout idea and made a tour of the country to visit a number of the most successful Boy Scout and private boys' camps. On this trip he visited the Culver School of Woodcraft, on Lake Maxinkuckee, Indiana. He was deeply impressed by the work being done and spent a week in observation there, subsequently becoming chief of the school, an office which he still retains, and to which he gives his full attention in the summer months.

He spent two years examining and studying methods used in training and organizing boys, and perhaps few people know the real boy better than he. For many years his pen has entertained them, as he has written sixteen books of boys' fiction and travel stories. He has organized a system at Culver which has developed some two thousand lads of the woodcraft age into capable, self-reliant, courteous young chaps. Further, he is a teacher of boys' leaders. He is head of the Culver Scout Leaders' School, a short course for grown-ups who want to fit themselves to instruct and train boys in scouting.

The chief, as he is known to the woodcrafters, has made an intimate study of boys and their interests. He follows the policy of being a "Big Brother" to the lads he has under his wing. He preaches the gospel of "lead, don't drive."

"Set an example at all times," affirms this explorer-teacher-writer. "Inspire the boy. Be kindly and sympathetic and he will respond to your leadership."

THE SEA

TITAN power's slumber hours: sleeping, rest-less sea.

Fitful in tranquillity, with dream-toss in thy roll.

Seems thou art a life apart—Mace of Majesty;

Showing e'en in silences the gleam of super-soul!

I love to watch thy moods and ways.

To thee the ages are as days!

Now wake, O Sea!

On all the main thy anthems rain! Rejoice with me in crashing chord!

In melody

Exult refrain in spindrift strain! As light set free flash bright thy sword,

Triumphant Sea!

Come, shrieking gale! Let drenching flail of surges quake the strand!

O Sea of Time, thou art sublime—in tempest wild, or calm.

Enchanting Sea! Thou art to me, the Hollow of God's Hand—

For biting wound is gently bound, and sealed with healing balm.

Transcendent Sea!

Mightiness! Humility! Can't smile—and yet cares.

Awful in engulfing wrath; Grim Master of Distress.

Ranging in thy timbre from roaring rumble deep To muted notes unechoed. O Sea, lull me to sleep.

—James McLeod



Chief Wallace personally instructing a group of woodcrafters in the tricks of cookery while on the trail. The woodcraft chief has a faculty of over fifty men who help in the training course

Company post, and within forty miles of the nearest trapper's cabin. Wallace and the Indian immediately set out in vain hope that they might kill game and find food to save Hubbard's life. But with weeks of starving, and with no other nourishment for many days than dried skins and occasionally a few wild berries—and perhaps also because of illness which he had suffered in the early summer, Hubbard's strength was spent, and on the day of their departure from his camp he died from exposure and starvation.

A blizzard overtook Wallace and the Indian, and unaware of Hubbard's death, Wallace turned back in the thick-driving snow with the thought of caring for Hubbard, while the Indian pushed on toward the trapper's cabin to secure assistance.

By almost superhuman endurance and vitality Wallace, without food or shelter, dragged himself through the snow for fourteen days, but in the driving blizzard failed to find the tent where Hubbard lay dead. He was no longer able to walk, and could scarcely have survived another day when he was found by a party of trappers dispatched from the cabin by the Indian. When found, Wallace's clothes were in shreds; he had eaten his worn-out moccasins, his feet were frozen, and the remnants of his stockings were clotted to his feet by blood. The rescuers moved him to the Hudson's Bay Company's trading post. Gangrene had developed in his feet, and a physician from a nearby lumber camp roughly cut away the infected flesh with crude instruments and checked the disease. The explorer was more dead than alive for several weeks, but he gradually gained strength. When strong

A few pages of gossip about

Affairs and Folks

*Brief comment on current happenings, and news notes
about some people who are doing worth-while things*

WHEN little Lillian "Billie" Dove appeared in person and presented her moving picture, "Beyond the Rainbow," she was at once christened "The Rainbow Girl," for she has a personality with all the prismatic hues of sweetness, sincerity and youthful beauty.

"Billie" Dove was born in New York in 1903. We need say nothing further about her youth. As a girl in Central Park and thereabouts, she was known as a lover of riding. Strange to say, this young New York girl had no thought of pictures when she was chosen as a model by an eminent artist. In one of the illustrations made by Will Grefe, she attracted attention and became popular among illustrators as a model when a mere child.

She took up dancing as naturally as a nymph of the woods. Then she developed a theatrical ambition and joined the Ziegfeld organization, but all the time had no idea of pictures. One morning a friend insisted that she go and see a director. The director, with all his temperamental brusqueness said: "No, there's no place for you," even after he had taken mental measurements of her face and form. However, he took her name and address, and within a week, without any previous experience, she was appearing in a picture, which indicates that a man's "no" may mean "yes," as well as a woman's "yes" may mean "no" or vice versa. Once in pictures her strides forward were rapid.

She has appeared in the all-star cast of "Get-Rich-Quick-Wallingford." She has also played opposite Constance Talmadge, and even in those days when in the shadow of stellar greatness her personality gleamed forth and she was starred in "At the Stage Door." When Robertson-Cole wanted an all-star cast for "Beyond the Rainbow," they naturally chose the little "rainbow girl" to lead the cast. The story of that picture is related by her in a colloquial way that wins the hearts of her audience. She tells of the wonderful days and the trials and tribulations experienced in making the picture. She just lives the story over and over again, and no wonder that it is radiated so intensely upon the screen.

At a dinner where many motion picture actresses appeared, "Billie" Dove was the one chosen by a keen-eyed writer as a personality who contained interest, for it is not only her simplicity, youthfulness and beauty that attracts, but it is the quiet, ladylike and cultured manner of a gentlewoman that appeals. Her thoughtfulness for others and that outburst of youthful enthusiasm recalls Emerson's words "that all the world loves youth in its simple purity."

Some of Miss Dove's ardent admirers insist that the last name she has chosen is most fitting and appropriate, for if there's anyone that has all the placid, peaceful serenity of the dove, it is the charming "Billie." She even loves the name of "Billie" more than she does the stately name of Lillian, which sounds so much like a character in a melodrama.

On her tours Miss Dove is accompanied by her mother, and the companionship of these two is charming. They have heard her at the studio and in the office of the producers and elsewhere calling up her mother. That sweet, "mother-dear," considerate way indicates that, after all,

the great thing in "Billie" Dove's life is her heartfelt sympathy and affectionate regard for her mother.

Although born in New York, she has all the charm of the domesticated American girl of the 1920's, and it does not require any prophetic vision to forecast for her a career that will give her a pre-eminent place among the popular favorites in the realm of the screen.

The Man Who Pulled Illinois Out of the Mud With the Good Roads Gospel

IN recognition of his splendid services in "Pulling Illinois out of the mud," his enthusiastic friends in the 18th Congressional District predict that William P. Holaday will be nominated as the candidate of his party to succeed that veteran statesman, Uncle Joe Cannon, in



MISS "BILLIE" DOVE, still in her teens, dark-haired, brown-eyed, and possessed of a career remarkably brilliant for one so young. Until Metro Pictures Corporation announced recently that Miss Dove was now a full-fledged star, she had been achieving distinction in Cosmopolitan Productions, released by Paramount. Miss Dove already has undertaken the long transcontinental flight to Hollywood. The name of her first photoplay has not been announced, but it is understood that it will be a comedy-drama

Congress. Mr. Holaday was floor leader for the Republican party in the last session of the Illinois Legislature, of which he has been a member for the past fourteen years, and is the author of much important road legislation.

Born on a farm in Vermilion County, the home of Joseph Gurney Cannon and John R. Thompson (of restaurant fame), Mr. Holaday lived on



WILLIAM P. HOLADAY, for fourteen years a member of the Illinois legislature, lived on a mud road until he became imbued with the idea that good roads and civilization go hand in hand. He risked his political career at its very beginning by advocating the cause of good roads, with its attendant heavy tax upon the voters. Now in recognition of having "pulled Illinois out of the mud," he is being talked of as successor to Uncle Joe Cannon in Congress.

a mud road all his life until he went to the state university law school, and like Caesar, he became imbued with the idea that good roads and civilization go hand in hand. It took a good deal of courage for a young man in Mr. Holaday's position to preach the gospel of good roads, back in 1908 when he was first elected to the legislature. His constituency was chiefly made up of farmers yet to be convinced that good roads would be a profitable investment for them, and he risked his political career at the very beginning by championing the cause of good roads. But he was a very practical person and none of his ideas were extreme. In a quiet, painstaking manner, he became the evangel of good roads for Illinois and conducted an educational campaign. He showed the people the dollars and cents value of all-the-year-around roads, and as the automobile developed from an expensive luxury to an economical business proposition, the majority of voters in Illinois became converted to good roads, and voted to build them.

A few years ago motoring in Illinois was as much dependent on the whim of the weather, as was ocean shipping in the days of the "Wind-jammers." The fertile black muck soil, which is the "Corn Belt's" basis of wealth, defied all efforts to shape it into all-weather roads. A few hours rain was sufficient to transform the dusty dirt road into a veritable "Slough of Despond" for the unfortunate motorist who was

caught upon, or rather *in* it! But the native "Suckers" were used to it. With a patience inherited from pioneer ancestors, they waited upon the weather, and used their roads when they could—which usually was about half of the time.

When "Hard Roads" were first proposed they were promptly and overwhelmingly voted down as a Utopian dream. Abe Lincoln had ridden the circuit over those roads, and Grant had hauled cord-wood down to St. Louis over them, and the foes of "Hard Roads" felt it would be little short of sacrilege to tamper with Nature. Then there was the expense. Indiana, of course, had a gravel-pit every few miles, but road building in Illinois was different—practically all of the material had to be shipped in. And taxes were high enough. And there the matter stood—and rested for years—and Illinois remained stuck in her own mud.

Then along came William P. Holaday who believed good roads would pay dividends on the investment, and now it is possible to make a seven hundred mile swing around the state, driving over excellent pavement. Starting from Chicago, one may drive to St. Louis through Peoria and Springfield and return via the "Old National Road" (surveyed in Jefferson's administration), and the "Dixie Highway," through Vandalia, Marshall and Danville. A scout car of the Chicago Automobile Club recently made this trip in twenty-six hours.

Mr. Holaday's home county (Vermilion) was the first in the state in the good roads movement, and began by voting a bond issue of a million and a half dollars for paved roads in 1914; 220 miles of pavement have been completed and 91 miles are yet to be built. One can now leave the Court House in Danville and drive for a distance of 105 miles on a paved road without doubling on his tracks. In addition to this loop, there are 115 miles of paved roads which connect other parts of the county with the county seat. So thoroughly has Mr. Holaday's gospel of good roads been preached in Vermilion County that at a recent township election a \$65,000 bond issue for additional paved roads carried with only 10 dissenting votes.

Many other counties are following the lead of Vermilion, and in a few years Illinois will have a state-wide hard road system second to none. And more than to any other man, this is due to the untiring efforts of William P. Holaday.

* * *

The Senior Senator from Michigan is a Sturdy Champion of Agricultural Development

WHEN Charles E. Townsend first answered the roll call in the House of Representatives he could not resist answering: "Here! From Michigan!" The added two words was an unusual response, and some of his new colleagues smiled. But high up in the Speaker's chair was Uncle Joe Cannon, who, with cigar tilted at proper angle remarked: "There's a young man who is going in the direction of the Senate."

Charles E. Townsend is one of the many Senators who have been recruited from the House. There are more Representatives in the Senate at this time than ever before in history. This may be due to the direct election of Senators by the people, which makes the Senate an elective body, the same as the House, and gives the Representative hope that he can expand his Congressional district campaigns into state campaigns and hope for a senatorial toga.

Senator Townsend was born in Concord, Jackson County, near the very spot where the Republican party was born. The date also was 1856. His early days were spent in school during the Civil War, when he imbibed a real spirit of patriotism. He entered the literary department of Michigan University in 1877 with an idea of taking up literary work, but the call of the law was too strong and in 1895 he began the work of the profession. Soon after he was elected to the 58th Congress, serving four consecutive terms.

His work on the Townsend railroad bill in the House was the foundation for a later career in constructive legislation that has been most gratifying to his constituents.

In years to come, when ocean liners steam down the St. Lawrence, through the Welland Canal and into the great midwest ports of Chicago, Milwaukee, Green Bay, Houghton, Ashland, Superior and Duluth, the name of Senator Townsend, now senior member of the Upper House from Michigan, will be inscribed in the leading paragraph of the history of the enterprise which will soon revolutionize trans-oceanic shipments.

It was Senator Townsend who introduced and secured passage of the resolution authorizing the President to enter into an agreement with Canada and Great Britain for the joint construction of the waterway. The meeting of the St. Lawrence Tide Water Association at Detroit two years ago was an appreciation of his work at the Great Lakes. He was the first in the initiation of the proposition for the development of this work, and he it was who gave the most vivid, convincing utterance of the American spirit of enterprise and international comity.

This one project of Senator Townsend's, when it is carried through, will mean more to the agricultural and industrial development, not only



SENATOR CHARLES E. TOWNSEND of Michigan introduced and secured the passage of the resolution by the Senate authorizing the President to enter into an agreement with Canada and Great Britain for the joint construction of the St. Lawrence waterway—a project destined to revolutionize trans-oceanic shipments

to his home state of Michigan, but to the entire middlewest, than can now be measured.

Though himself originally elected by the legislature of his native state, he voted for and strongly favored the amendment providing for direct election of Senators, and was rewarded in 1910 by being chosen as the Republican nominee under the first advisory primary ever held in Michigan. At that time he received forty-one thousand votes more than his opponent and was the first senator elected through the direct vote of the people under the law he helped to make.

Among his most important activities there may be noted his work as Chairman of the Senate Committee on Post Offices and Post Roads. In addition to being the ranking member of the committee on Interstate Commerce, he acted as chairman of this committee for nearly eight months during the long and serious illness of Senator Cummins.

Senator Townsend may truly be called a champion of agricultural development. His whole legislative record is shot through and through with his efforts to secure justice to the farmer in

the matter of prices, equitable transportation rates and scientific information, which might aid in increasing production. As an instance of this phase of his career, the following bills for which he voted and spoke in favor of may be noted.

The Grain Standard Acts.

The Federal Farm Loan Act.

The act to authorize an association of producers of agricultural products.

An act to provide an increased appropriation for experimental stations.

An act for diffusing among the people more useful information on marketing and the distribution of farm products.

An act for the investigation of soils.

An act providing that labor, agricultural and horticultural organizations be exempt from taxation.

The activities of Senator Townsend in connection with his ever-vital interest in the farm community is a long record of remedial legislation. In other matters of public and international importance he has often been active and many times instrumental in securing the passage of important legislation.

He has always been an ardent supporter of economy in governmental administration during the time when many of his colleagues apparently cared little for the conservation of national finances. He supported and spoke in favor of the woman suffrage amendment. Workmen's compensation he has always favored, and the interest of shippers has always been uppermost in his mind.

All in all, Senator Townsend's record in the Senate and House is one of remarkable, constructive and far reaching all-round service. His aid to returned soldiers in matters of securing medical treatment and just compensation is remembered by hundreds of people in his own state, and his efforts to secure progressive and efficient national reforms and governmental economy have been of widespread influence.

* * *

Historic Portsmouth has a Live-wire Citizen and New Hampshire an All-round Booster

IT was in Washington that I first met F. W. Hartford. The place was the steps of the Treasury Building. He was with a gathering of editors, and before I had known him three minutes he had told me all about Portsmouth, New Hampshire, his home town. He is a hustler and keeps his top vest button pushed out. They are

now always expecting to find live wires in Portsmouth. It has traditions as one of the good, solid, old, homely New England towns, and has a naval history that reaches back to the days of Paul Jones, for here it was that Paul Jones built his ships.

Mr. Hartford was born in New York State about forty-nine years ago, but left the city to win fame and fortune. He started his newspaper career on the Manchester, N. H., *Union*, and at sixteen years of age he was the Portsmouth, Exeter and Dover correspondent for the *Union*. He afterwards acquired the Evening *Herald*, *Morning Chronicle* and the *New Hampshire Gazette*, which is said to be the oldest paper of continuous publication in America. This at once gave him distinction, and then and there he took out his citizenship papers in New Hampshire and has been a hustling New Hampshireite ever since. He married Miss Elizabeth H. Downing, and is the proud father of a son, Justin Downing Hartford, who is an ensign on the Sub No. 010, and two daughters, one a Smith College girl and the other Bradford Academy.

In politics Mr. Hartford is a staunch Republican. He is always keen for the progress and development of the state and his party. He served the School Committee and was a major on the staff of Governor Keyes. Three hundred and sixty-five days in the year, and an equal number of nights, he is boosting Portsmouth as a place to do business in, proclaiming the advantages of its harbor, to say nothing of surrounding towns as premier summer resorts. He was for a long time the general manager of the company that has maintained steamboat service between Portsmouth and the Isles of Shoals in the summer time.

He is a builder of things. In his second term as Mayor his home town and the home folks declare that he is some executive. He will keep Portsmouth on the map as long as he is in office. Now his home folks declare that he is good material for something further up, and they are not particular which it is—governor or congressman. They do insist that Mayor Hartford is by training and capacity entitled to the highest recognition in a State where he has spent such an active and busy life of constructive work.

* * *

"Lucky" Harry Frazee, the Red Sox Owner, is Known as "The Croesus of Broadway"

A GREAT deal has been said about Harry H. Frazee and baseball. Indeed, Boston has exhibited such grave concern over the problem the president of the Red Sox has both daringly and adequately handled, that some of his most interesting aspects as a theatrical producer have been entirely overlooked.

First and foremost, Harry Herbert Frazee is a man of the theatre. Before he was out of High School he was in the theatre-game, assisting in the management of the Opera House in Peoria, Illinois. That was twenty-five years ago. Ever since that time he has been identified with theatrical productions stretching all the way from "Madame Sherry" to his present play, "Smooth as Silk," now playing at the Selwyn Theatre, Boston.

There is a legend on Broadway that Frazee was born with a gold spoon in his mouth. Many people are ready to tell you that he is "the croesus of the American theatre, that everything he touches turns into gold!" "The Frazee luck," current rumor calls it. As a matter of fact, everything he has linked himself with in the theatre (to say nothing of baseball) has turned to gold. At forty, the age when many men are merely beginning their careers, Frazee is already a millionaire.

Doubtless H. H. Frazee is a favored child of fortune, but his prosperity that has become a tradition in professional circles is not simply a matter of good luck. About 99 and 87 hundredths per cent of his so-called luck is a pre-

scient, judicious hard headedness; in other words, his theatrical sagacity astounds his competitors. He is long-sighted, astute—an intrepid, audacious man, dogged in a fight and never afraid to venture.

Yet when he plunges fearlessly ahead, he never loses his footing in the quixotic mudholes where many of his contemporaries flounder. It is



HARRY H. FRAZEE, theatrical producer and baseball magnate, is a beacon light on New York's rialto. His admirers speak in hushed tones of "the Frazee luck," because of the tradition that everything he touches his hand to turns to gold

characteristic of Harry Frazee that he knows where to draw the line between the rash and the prudent undertaking. Whether it may be attributed to a cool command of situations, a cautious presence of mind, or an extraordinary intuition, cannot be determined. One thing, however, is certain and that is that Frazee knows the theatre. He is not only thoroughly acquainted with the managerial end of the producer's game, but his fundamental knowledge of actual stage direction is sound as a bell.

Only on rare occasions, to be sure, does the producer indulge his talent in stage directing. As a general thing his casts for his new plays are selected by his manager, seemingly without his supervision, and they rehearse for weeks, with Frazee apparently unaware of their existence. But when the last rehearsal draws to a close or the "try-out" performance, as in the case of his successful crook play, "Smooth as Silk," quite unexpectedly out of a clear sky the stocky, heavy set figure of Frazee turns up at the theatre. Generally he picks out an upper box or a seat midway in the orchestra and sits down unobserved, to watch with his keen, alert grey eyes, every word, every move, every line that is spoken. As one of his actors remarked in the homely idiom, "Believe me, nothing gets by that guy!" Not a shoddy "prop," not a faulty bit of "business," not a wrong inflection but Frazee is aware of it.

During the "try-out" performance of "Smooth



HIS HONOR MAYOR F. W. HARTFORD, of Portsmouth, New Hampshire, is a persistent and consistent booster of his state and city. He is the owner of the *New Hampshire Gazette*, said to be the oldest paper of continuous publication in America

as Silk" he sat unnoticed in the orchestra and made over seventeen pages of notes, all corrections designed to enhance the play. The following day an additional rehearsal was called to



ERNEST G. WALKER is changing the downtown sky line of Washington and solving a serious housing problem with the artistic and "homely" eight-story apartment houses which he is erecting in the heart of the residential district

put his revisions into effect. Some were small items and some were big ones, a word here, an over-stressed sentence there, a bad movement, a lack of emphasis, an inadequate "prop." When he finished the final rehearsal he had achieved in a few hours' time a play and performance, if not absolutely perfect, so closely approximating perfection that the first night audience that crowded into the Selwyn Theatre thundered whole-hearted approbation and have flocked in steadily ever since, still paying their enthusiastic tributes.

Only because Frazee knows the theatre has he been able to get big results. There is no job "back stage," or in "the front of the house" that he is not capable of handling just as well if not better than the man he employs for the job. Yet he seldom bothers with details. If he knows the reins are in expert hands he is satisfied; but he must be able to pick them up himself at any moment he feels inclined and dash ahead at breakneck speed with no danger of incurring mishap from his employees' inefficiency.

One colorful phase of the man's character is his delightful bravado in the face of critical situations. An early experience with his first show, "Uncle Josh Perkins," is a typical one. It was in Waukesha, Wisconsin, and Frazee was experiencing his first thrills as impresario and producer. The night his production was scheduled to open he made the tragic discovery that he was broke, —dead broke, with only a quarter in the whole wide world to bless his name with. A less

audacious soul would have sat down and bemoaned the wretched and inevitable consequences which meant that the next morning his company would be stranded, owing both railroad fares and hotel bills, and the manager himself would be left high and dry—frankly an embarrassing condition. The young producer knew he was stuck—he couldn't raise enough to pay his fare out of town. . . . Should he jump a train? . . . beat his way back to Chicago? . . . make his getaway before his show proved itself the "fliver" it was sure to be and left him in disgrace as well as poverty? But instead of any of these alternatives, he strolled down the main street of the town with complete *sang froid*, and thought it over. At the corner he stopped and spent his last quarter on a twenty-five cent cigar, deliberately lighted it, turned around and walked back to the theatre again puffing away with supreme composure. But that night his show was a hit! He not only had enough to pay actors, hotel bills and railroad fares, but sixty dollars over for his own pocket, his profits in his initial venture as a producer.

Broadway calls it luck. It's quite true that this "Cæsus of the theatrical world" turns plays into gold, but not by chance or fate or any law of predestination. Frazee's "luck" is in his thoroughly sound knowledge of the theatre, and his breadth of vision that glimpses beyond to-night's box office receipts!

THODA COCROFT.

* * *

Washington's Housing Problem is Being Taken Care of by a Former New Englander

WASHINGTON'S housing king is a New England Yankee, a graduate of Harvard, and for a long time notable in the list of Washington newspaper correspondents. Readers of the Boston *Herald* and the *Springfield Republican* will remember Ernest G. Walker's Washington dispatches for a period of fifteen years before he put aside his pen and began building "monuments" down through the heart of residential Washington.

These "monuments" are big and artistic eight-story apartment houses, that break the downtown skyline of the Federal city beyond all others in height and numbers. They stand as efforts during and immediately after the great war to relieve the housing shortage.

These enterprises have proven to be highly successful, although undertaken at a time when most men were afraid to venture. Mr. Walker's management and judgment have focused the confidence of business men and bankers in the District of Columbia. His operations now run into several millions of dollars. In thoroughness of construction and in rapidity of completion, his engineering methods are said to surpass all previous Washington records.

He owns and finances his own enterprises, and no others, and does business solely as an individual. In the belief that Washington is rapidly passing from the status of a great village to an international capital, soon to have a million population, Mr. Walker goes on buying the most expensive corner lots and erecting thereon skyscraper apartments.

His career is the topic of no little comment in Washington. Many an old friend of his newspaper days is asking:

"Well, Ernie, how did you do it?"

* * *

Home Furnishing and Decorating are Reduced to an Exact Science by Chicago Woman

THE twenty-eight model furnished rooms on the eighth floor of Marshall Field & Company's retail store at Chicago claim the attention not only of Chicago residents, but of the traveling public as well. The exhibition is one shown to out-of-town guests, for who is not interested in a beautiful home?

The dainty little woman who so capably supervised the designing, execution and furnishing of

those rooms is Corinne Lampard, who for several years has given Chicago and the country at large some of the best examples of home furnishings and decoration.

In order to prepare a course of home study particularly adapted to meet the general demand for better homes and better furniture, she has severed her connections with Marshall Field & Company to open a studio at 82 East Elm Street. Here is that indefinable something for which we resort to the hackneyed word "atmosphere." Here harmony seems tangible—it is seen and felt.

The day of the specialist in home making is here, just as in other professions, Mrs. Lampard feels. She says: "We can no more allow our children to be reared among incongruous and inharmonious surroundings than we can allow them to speak incorrectly. The decorator who excels in hotels and cafes often fails miserably in making homes homelike, and the decorator who specializes in the closed-in city apartment does not do the best country homes, where for background the broad expanse of green fields and sunshine must be dealt with instead of brick walls and hazy smoke."

"Husbands might spend more evenings at home, wives be made more contented, children be joyful if more attention were paid to individual requirements in home making."

"I have always maintained," continues Mrs. Lampard, "that if a person sat for even a short time in a room where someone constantly played discordant notes on a piano, it would become unbearable, and not be tolerated. Just as surely, but indefinitely, do the discordant assembly of objects or furnishings, the inharmonious combination of colors that do not blend, affect the ner-



MRS. CORINNE LAMPARD of Chicago is a scientific decorator and furnisher. Twenty-eight model rooms on the eighth floor of Marshall Field & Company's retail store attest her artistic judgment and prove absorbingly attractive not only to Chicago home-makers, but to visiting travellers as well

vous system of people of culture and refinement, not to mention temperament. For a cultured person to find a dainty French brocade on an early English chair, or a large bold design Italian antique cut velvet on a Sheridan settee is most offensive.

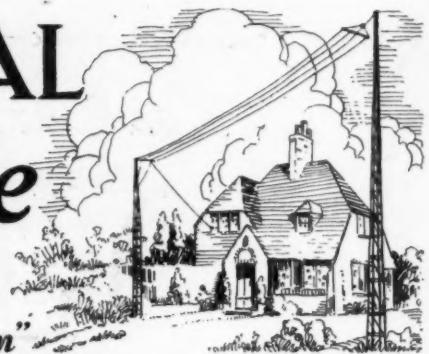
"Most incongruous is our American adaptation of the so-called Italian villa with its imitation caen stone halls, imitation marble floors, stone mantles and then—mahogany paneling. Again, how distracting to enter a room with walls covered with figured paper, floors bright shiny yellow oak, and window and door frames streaks of mahogany. A sensitive person becomes irritable without defining the cause. Composure is impossible, for no matter from what angle he turns, he subconsciously registers the distracting streaks of those pronounced frames and the conspicuous yellow floors.

(Continued on page 44)



The NATIONAL RADIO Circle

*Conducted by Wireless Experts
in the Interests of those who "listen in"*



THE East is "radio mad" and the passing months have seen thousands and thousands of new converts as huge radio expositions have been held almost weekly. The Boston show, under the direction of S. H. Fairbanks, who was responsible for the installation of a broadcasting station by the Detroit News, was the climax of every radio show to date. There was more than mere exhibits. A twelve-hour program of lectures and demonstrations gave the new fan a thorough understanding of the science which will soon revolutionize our means of communication.

Following the Boston show came the Brooklyn exposition, with a second show to be held in New York. Crowds were turned away from the first exposition at the Pennsylvania Hotel.

The Eastern States are seeping in radio waves, and the tide is rapidly sweeping westward. New broadcasting stations and thousands of dealers have sprung up almost overnight to satisfy the demand of those who would enjoy this new found entertainment.

* * *

Even the dome of the National Capitol carries its radio antenna now. A long aerial has been stretched from a point on the dome to a corner of the flat roof below, and the aerial leads to the office of Elliott Woods, architect of the Capitol, who is a confirmed fan. There is also a receiving set in the office of Representative McFadden, of Pennsylvania, Chairman of the House Committee on Banking and Currency. Mr. McFadden's set requires no outside antenna but is operated with a loop aerial.

* * *

Anything that can be done by wire, either telephone or telegraph, can be done by wireless, and it is simply a matter of applying a principle which has been scientifically proved to make this possible, according to Professor Elihu Thomson, one of the consulting engineers of the General Electric Company. The sending of photographs by wireless is feasible, but will take some time to develop. Already simple characters, like the letter H have been transmitted and received by radio with light effects forming the structure of the character at the receiving end. It is by perfection of this that C. Frederick Jenkins, inventor, hopes soon to send photographs.

* * *

Recently there was found in London among a heap of old clothes, apparatus employed by Sir David Hughes in wireless telegraphy experiments which he conducted nearly twenty years before Guglielmo Marconi took out his first patents in 1896. The instruments, though crude, were complete and, according to entries found in notes of the inventor, he was able to hear the transmitter three hundred yards from the sending point.

No more the lonely lighthouse keeper. The Department of Commerce is planning to equip the principle lighthouses, lightships and large sea-going tenders with radio sets, which will enable the keeper not only to communicate with the mainland, but in many cases to "listen in" to concert broadcasts.

WHAT TWO BOYS ARE DOING IN RADIO

EDITOR'S NOTE.—Every prominent expert of today started experimenting with wireless when a boy. Radio seems to be the science of the new generation.

In the host of letters received by the Radio Editor two have been selected to show what the boy of today is doing in radio. If you are a novice of the older generation, you will be interested to learn with what leaps and bounds the boys have gone ahead in the new science. If you are an amateur and have already conducted experiments with your own set, you will undoubtedly pick up some valuable pointers from the following articles. Both boys are in their teens. John B. Russell, Jr., of Faneuil, a suburb of Boston, is fifteen, and operates Station 1CSZ. William B. Kent, eighteen years old, of New Haven, Connecticut, has conducted dozens of experiments to increase receiving apparatus efficiency. He tells of some of these in his letter.

HOW I GOT MY AMATEUR LICENSE

By JOHN B. RUSSELL, JR., STATION 1CSZ

About two years ago I became interested in radio through a boy who had a receiving set. One day we were in an electrical shop when they were receiving world series returns over a large set. The operator was copying the report from the navy yard and placing the score on a card

Continued on page 41



John B. Russell, Jr.

RECEIVING SET EFFICIENCY—THE AERIAL

BY WILLIAM B. KENT, NEW HAVEN, CONN.

A good aerial is a very important factor in wireless. It is well known that a weak set connected with a good aerial will give remarkable results. Therefore after building my first simple instruments I started to experiment with aerials. Fortunately our house is on a hill in the country away from all electrical interference except the hum of our electric light line. Wishing to find a position to place the aerial where the hum



William B. Kent

would be the least, I engaged the services of a friend to listen at the instruments. I then insulated both ends of a long wire, attached one end to the house (with a lead in to the instruments), and carried the other end so that it described the arc of the circle of which the attached end was the center. I was always careful to keep the wire pulled tight so that it would not touch the ground. The point where my friend at the instruments found the least hum luckily happened to be at the foot of a tall tree to the top of which I permanently fastened the loose end of the wire.

Soon after I put up another wire at right angles to the first and parallel to the ground. I tried this new wire separately and then with the other and found in using them both together a vast improvement, both in the new stations gained and the additional loudness of the old ones. I permanently joined them together, taking the lead in from the vertex of the angle.

My first tuning device consisted of three coils,

(Continued on page 41)

Radio nomenclature: Novice—amateur—ham. Which are you?

The Record-Smashing American "Ham"

He belongs to the inner circle of the radio fraternity and talks in code. He has relayed speeches from our governors to President Harding, aided the investigations of government bureaus, and smashed all sorts of records. Lightning communication between Paris and Hong Kong is the new world he seeks to conquer

FIRST of all, if you are a radio novice you must get this straight: the radio "ham" is an entirely different species from the "ham" as the word is used in the slang of the streets. The "ham" is the man who has been initiated into the inner circles of wireless, who talks in code with his neighbors in distant states while those of us who are new at the game must be contented with programs from the nearby broadcasting stations.

Already a nomenclature is growing up around the new wireless science. A novice, and in this class most of us belong, is one getting his first lesson in listening in, to whom the thrill of catching a voice of any nature over the Hertzian waves is an all-sufficient experience, one of life's superlative moments.

Next there is the amateur, slightly more advanced. He understands in a general way the use of the detector and the tuning coil and may even speak vaguely of variocouplers and wiring diagrams.

And then there is the full-fledged American "ham!"

This is a story which tells what the American "ham" is accomplishing, which disclosed that even before the radio craze had ensnared us in its fascinating net he was transmitting code signals all over the United States and to Honolulu and even across the ocean to far off Scotland.

It was along in 1914 that C. D. Tuska, a high school boy who had become interested in radio, and Hiram Percy Maxim, the noted inventor of the Maxim silencer for firearms, conceived the idea of organizing a league of all the amateurs who had sending stations, with the aim of relaying messages back and forth without charge. The American Radio Relay League, organized at Hartford, Conn., resulted. First a message was relayed with the aid of several other amateur stations, from Hartford to New York. Amateurs along the route joined heartily in the plan. Ambition, however, is one step ahead of performance, and a message was soon relayed in the same way as far as Boston. Then it was San Francisco. Mr. Tuska, still in his teens, became secretary of the League and Mr. Maxim president. Today ten thousand wireless amateurs, scattered all over the United States, are members. One chap in Honolulu is in regular communication each evening with several stations in California. Interest has been stirred up in far off Iceland and South American stations are anxious to join in the amateur relay work.

There are eleven divisions of the league in the United States, five in Canada, and one in Alaska, each with a regular division head, who supervises all the stations in his district. There is also a provisional division in Hawaii. There are individual operators in the Phillipines and one in China, so it may not be long before active communication between the Far East and the United States through these amateur stations will become an accomplished fact. Measuring in actual globe circles, China is three hundred and fifty miles closer to Hawaii than are the Phillipines, but even then there is a gap of five thousand miles which must be covered in one jump.

Mr. Maxim, president, F. H. Schnell, traffic manager, and K. B. Warner, secretary, at pres-

ent direct all activities. They are all elected by the amateurs themselves.

Ever since the league was formed, it has constantly, "pulled off" one stunt or another; relaying of the message to San Francisco was the first big accomplishment.

"We try stunts just to get some fun out of radio," the secretary said. "We regularly handle relay routes, but occasionally we knock off and try for a record."

One of the recent records set up by the league amateur operators was to relay a message from



PAUL F. GODLEY, who "listened in" at Androsson, Scotland, for the message of American amateurs, and recorded over thirty stations. A real debt is owed to Godley by radio fans for his application of the Armstrong regenerative principle, to the ordinary short-wave receiving sets.

the Atlantic coast to the west coast and get the answer back in a total elapsed time of six and one-half minutes. In the relaying of this message, which traversed a total of over five thousand miles, four stations participated. Not long ago the league members relayed messages from the governors of the various states to the president, and forty out of the forty-eight messages were safely delivered. Five failed to get beyond the starting point and only three were "hung up" in transit. This was another record.

Co-operating with the United States Bureau of Standards, the league has conducted "fading" tests. From the results of these tests the bureau has been able to work out a map showing just where the peculiar spots at which wireless messages seem to evaporate are located. The map makes it possible to study the reasons for this strange isolation at certain districts.

From time to time for the last few years, re-

ports have come back from stations in England and France that code messages sent by amateurs in America had been picked up. American amateurs strove to get a report that their particular station had been heard abroad. Several were successful in confirming these reports.

It was hard to get an accurate check on such data from Europe, and the league finally conceived the idea of sending its own representative to Europe to conduct listening tests with a view to ascertaining just how successful these American stations operated by amateurs really are.

The more powerful commercial wireless stations send their transatlantic wireless messages at a very high wave length and is consequently much more easy to get a message successfully across the water, but the amateur operator, limited by government regulations and by the capacity of their own instruments, must do their sending on a wave length varying from 200 to about 375 meters.

The amateurs asked Paul F. Godley of Montclair, New Jersey, to make the trip to Europe and listen in for the American signals. Mr. Godley knew all about short wave sending, the zone in which the amateurs worked. Incidentally he knew a good deal more than that too. Godley is the man who first adapted the Armstrong regenerative circuit to short wave work and he originated the variometer regenerators which have made possible the wonderful progress of the American amateur wireless operators since 1914.

It was no little job, however, which he was asked to undertake. Night after night—every night and all night—he was to stay up listening for signals from this side of the Atlantic. The tests were to take place on ten successive nights. When Godley landed at Southampton he went immediately to the town of Ardrossan, a thriving little port on the coast of Scotland near Glasgow. The only good location in the vicinity was in an open field without buildings. So a temporary tent was erected and the aerial strung up. Godley and Mr. D. E. Pearson of the Marconi Company at Glasgow prepared for a long vigil.

A vigil indeed it proved to be. The first night it was cold and raw and each night proved worse. Part of the time a wild gale whistled through the flimsy tent. The fluttering flame of a lantern was the only light and a tiny oil stove did valiant but vain service in keeping the two men warm. The countryside seemed to rock in the worse weather imaginable. There were terrific downpours of rain, the result of a cyclone which passed nearby.

Godley had a job to do and he did it.

"About one A.M. of the first night we were picking up many high power stations and feeling for the short waves signals," he says. "At one thirty-three we got our first short wave spark. It was someone 'chewing the rag.'

"We could hear him off and on but atmospheric conditions made it impossible to understand his signature.

"That this was an American ham there was no doubt! I was greatly elated and felt very confident that we would soon be hearing others. Chill winds and cold rains, wet clothes, and the discouraging visions of long

(Continued on page 44)

An interview with Earl C. Hanson

A New Universe of Sound Revealed

Even the rumble of rose petals unfolding will soon be audible to human ears. The magnified sound of "tumbling fleas" has already shattered panes of glass. There are infinite possibilities in the vacuum tube, says the inventor of the vactuphone, an instrument with which the deaf may hear once more

DURING the war a young American doing research work in the Navy Department astonished the world with a series of remarkable inventions which made use of the marvelous little device known as the vacuum tube. By its use sounds hitherto unheard were brought within the range of human ears by means of amplifying or building up the tone waves. A whole new world of sound was bared.

For one thing, the tube was the secret of a device used in the war zone to overhear the Germans as they signalled from trench to trench. The messages were picked up by the Allies and relayed across the channel to headquarters at London. The Germans were completely mystified. They knew their signals were being tapped, but not even their wireless experts considered the possibility of listening to weak signals transmitted within their own trenches by means of enormously multiplying the sound.

Earl C. Hanson, the inventor, had no sooner succeeded in this achievement than he devised a complete system for guiding vessels through the most intricate channels without the use of human sight. This meant that by means of the new electrical device fog was completely robbed of its terror. Today it is only a question of installing the necessary apparatus before the agency of human sight in guiding vessels can be completely superseded and even the piloting of the ship may be done by electrical means.

In October, 1920, demonstrations of this invention, which he calls the Audio Piloting System, were given in New York harbor with the co-operation of the United States Navy Department. The vessel used was the destroyer *Seminole*, and in order to show how the pilot could be made absolutely independent of the necessity of seeing his course, the ship's bridge was entirely inclosed in canvas. So far as seeing was concerned, the steering apparatus and the man guiding the vessel might have been in the windowless hold. Great loss of vessels by collision and enormous delay during fogs, when vessels dare not enter the harbor have been overcome by the piloting system. Again it was the vacuum tube amplifier, similar to that used in signal detecting, which made the feat possible.

To be brief, the piloting is accomplished by an insulated cable laid along the bed of the channel through which an electrical charge is sent. This sets up a magnetic field about the cable. A ship is equipped with coils of wire, one at each side of the bow and these coils pick up the magnetic energy given off by the cable and amplify it by means of the vacuum tube so that it can be heard as a musical hum by the human ear. The officer on the ship by means of simply moving a switch can listen first on one side of the ship then the other. The relative loudness of the hum tells him on which side of the cable the boat is moving and enables him to accurately guide the course and pass other vessels even when the fog is so thick that they are invisible to each other.

Even as a little boy in California, where he was born twenty-nine years ago, Mr. Hanson was always tinkering with electrical instruments. He achieved a unique and marvellous feat when he constructed a wireless telephone—not telegraph—while he was still a boy in the grammar school in Los Angeles. With this he talked over

By JOHN B. CHAPPLE

short distances. When he was at St. Paul's preparatory school he continued his experiments. In 1911, when he was only nineteen years old, he perfected a system of wireless transmission which is the basis of important patents which he now holds. His whole life has been devoted to wireless and to experiments on the vacuum tube.

During the time that Mr. Hanson was conducting the Audio Piloting test in New York harbor he met dozens of men interested in electrical devices of every nature. Among these men was W. C. Mooney, who was vice-president of a company making electrical phones for the hard-of-hearing. There was a real bond between them. Mr. Hanson told the phone company official that he had in mind the perfection of still another device, which would make even the Piloting system and the Signal Tapping dwarf into insignificance. He intended to apply the marvellous vacuum tube amplifier to an instrument which would again open the world of sound to those partially or almost completely deaf. His own mother, whose hearing troubled her, prompted him to step out of the wireless field and develop a unique instrument.

"The deafness of my mother brought home to me the lonesomeness of the deaf," he said. "I early determined that some day I would invent a device with which my mother might hear and again enjoy the pleasures and sociabilities of human companionship."

"I perfected an instrument some years ago with which my mother was able to hear," he told Mr. Mooney, "but it is very bulky and weighs about seventy pounds. However, with the use

of the 'peanut' vacuum tube which we perfected for radio during the war, I feel sure that the device can be reduced to the point where it can even be placed in a little portable case."

Mr. Hanson and Mr. Mooney talked about the possibility of applying the vacuum tube principle in the manufacture of an instrument for the deaf. Up to that time the only known method of increasing the sensitivity of a hearing device was to add more batteries. But each additional battery placed in the circuit of the instrument resulted in more battery noise so that although the sound of the voice was increased the other conflicting noises became so great that the speech was rendered unintelligible.

Mr. Hanson explained the theory of the new device which he wished to perfect. Instead of attempting to secure greater sensitivity by increasing the number of batteries it could be done by means of a vacuum tube placed in the circuit, which would amplify or increase the volume of sound many times and make it audible to the person whose hearing was subnormal.

Mr. Mooney became enthusiastic at once over the possibilities of perfecting a hearing device along these new lines. He offered Mr. Hanson the unlimited use of the laboratories of the Globe Phone Company at Reading, Massachusetts. The young inventor made a trip to the Reading plant which was thrown open for his inspection. He studied the phones for the hard-of-hearing then being manufactured.

Further experiments followed, in which he was helped by all the facilities and material at the command of the Globe officials.

The result is the Vactuphone—a contraction of the phrase "vacuum tube telephone." It is just one more example of the (Continued on page 42)



EARL C. HANSON, the vacuum tube expert, and his invention, the Vactuphone, which intensifies sound waves so that the deaf may hear. Mr. Hanson was led to experiment in this field because his own mother was deaf. The first instrument he completed was bulky and weighed over seventy pounds, but it embodied a vital principle. Today, by use of the "peanut" vacuum tube—so-called because of its diminutive size—the apparatus has been perfected so that it occupies a little box the size of a camera. Mr. Hanson is the inventor of the system by which vessels are piloted without human sight, as well as the unique secret wireless telephone used by the Allies during the great war.

What Radio Means to the Home

An address broadcasted on the one-hundredth anniversary of the birth of Ulysses S. Grant from station WGI at Medford Hillside, Massachusetts, April 27, 1922

RADIO radiates the genius and the joy of acquaintance. Acquaintance is the magic that makes home the dearest spot on earth. Here the voice of the loved one is heard; here the cheer of companionship warms our hearts. Home is the very source of inspiration and achievement. We celebrate the memory of our great men at their homes and birthplaces.

One hundred years ago today there was born in a little cabin home in Mt. Pleasant, Ohio, a baby with a wisp of red hair. On that very day he was given the classic Homeric name of Ulysses—and a wise Ulysses he proved to be. Another name was added in honor of the mother who gave him birth, and he was christened Ulysses Simpson Grant.

Those initials of this illustrious name suggest "U. S."—the United States—the nation for which his valiant services achieved so much in preserving the union of our own United States of America. He is entitled to Uncle Sam's own initial letters of U. S.

Many of the army orders issued by General Grant on the field of battle, that foreshadowed great victories, were flashed over telegraph wires which first utilized the tongue of lightning's flame with the messages of man.

The telephone appeared in 1876, the year that Ulysses Simpson Grant, as President of the United States, opened the Centennial Exposition at Philadelphia, when the signing of the Declaration of Independence was commemorated one hundred years after the Liberty Bell rang out its hymn of freedom. The dots and dashes of the Morse code were vocalized.

Ulysses Grant was a home man. He knew the struggles at his St. Louis home, called "Hard Scrabble." When he retired from public life it was the home that he longed for. It was at Mount McGregor that he looked for the last time upon the sunset in the Adirondacks, knowing that he had fought a good fight and was going to his Home Beyond and eternal Peace.

Later, Thomas A. Edison, the wizard of Menlo Park, gave the world the phonograph, perpetuating and preserving the human voice. Then came the weird wireless, crashing ether codes, speaking in sparks. Now comes the soothing radio, glorifying speech, song and music in the homes of the land, unifying the nation into one great neighborhood circle.

Many of you are sitting at your own firesides, tuning up and listening to the voices of the world. The very whispering leaves, the roar of the ocean, the music of Nature far and near, as well as the voices of great statesmen and singers, now find their way through the magic ether and Hertzian waves to hearthsides of a million homes tonight.

The sombre gloom of isolation and the tragedies of loneliness have been dispelled. Distance has been annihilated, for the words and thoughts of all mankind now become a common reality through the voice of the wireless.

The old books on the library shelves contain definite, printed records, limited to their covers, but in the corner may be the lad absorbed in tuning up to catch the "call letters" of the Books of Life at broadcasting stations and choose what he may hear in the home. The liberty and freedom of choice has come with the development of transmission of the voice—measured in wave lengths and cycles.



THE Editor of the "National" who broadcasted the radio address, watching the flight of an aeroplane receiving wireless messages

Had radio come in the Civil War period, the quiet words and phrases of Ulysses Simpson Grant could have been carried to the bereaved homes of the thousands who had given up their treasured ones in the fratricidal struggle. It was his quiet voice that gave to the world those four ringing words that absorb the thought of the world today: "Let Us Have Peace." Every home longs for the halo of peace and understanding. Lincoln could have spoken his soul's sympathy from Gettysburg to the homes where vacant chairs told the story of aching hearts.

Today the voice of President Warren G. Harding paid his tribute to General Grant in Ohio. The words of the President now may be heard from coast to coast by millions of people, feeling the warmth of sympathetic tones and words, that touch that makes the whole world kin.

Morse developed his telegraph in the home, and his telegraphed words, "What God hath wrought," were the beginning of a succession of wonders associated with the perpetuation of the human voice. It is the human voice that we understand best, for mother's words come at the very dawn of human understanding.

The voices of mother earth today are becoming a common heritage. Radio meets the longing of the heart for human intercourse. People are ever interested in people, and radio has made

the whole world kith and kin. Even the music and thunders in far-off Mars and distant planets may yet be heard in the homes of earth, for radio travels at planet pace—spanning one hundred and eighty-six thousand miles a second. Who knows what will come with swift-footed Mercury as a messenger of space in this age of wonders?

How I wish I could put into this voice the words of cheer and hope that thrill me tonight as I stand in this broadcasting station at Medford Hillside, in Boston, not far from Lexington Green, where was fired the shot "heard 'round the world," sending greetings to the homes where patriotism is enshrined. What a panorama would be revealed if a picture of all the homes "listening in" could be flashed upon the screen of the heavens tonight! The stars now sing the glory of all homes in homelands where humans dwell.

"Broadcasting" is a new word in the vernacular—and one that has come to stay. The broadcasting of myriad voices to the homes is a suggestion of broadcasting ideas, broadcasting faith and cheer, broadcasting our better selves and broadcasting happiness.

Just think, I am reaching your home tonight without wires—nothing but that all-pervading ether, gentle as sunlight, glorious as moonlight, powerful as the fury of storms on sea and land—a new, strange medium that has been added to the blessings bestowed by the God of the universe for use of man. The elements of the earth and heavens are doing their best to serve mankind.

It was Senator Marconi, the inventor of the wireless, who told me in Italy during the war that the time was coming when he could call a friend from the deepest caverns of the earth or from the loftiest peaks, with the magic of wireless. It is all a matter of power in the broadcasting. Marconi, with only one physical eye, has seen visions that have thrilled the world and have become realities through his genius and mastery of the wireless waves beating upon the very shores of infinitude.

In the birthplace of Columbus at Genoa, Lloyd George, the wizard of Wales, struggling with the problems at Europe, finds his plea echoed to all parts of the world, asserting homes are the first and last defense of civilization against brutal war.

You are hearing these words before those who are standing by my side catch the tone, for wireless travels faster than sound. The radio message of the voice engirdles the world in one-tenth of a second and at a speed that almost brings the "Milky Way" within the ken of man.

Radio is today reaching the goal that echoes the song of the exile, John Howard Payne, when in a foreign land he penned the tender refrain "Home, Home, Sweet, Sweet Home." The glory of radio today far transcends even the great importance of its commercial use. Radio has brought the homes of the nation, the homes of the world closer and closer together. The universe has been validated. Through the wave lengths vibrates the communicating power of bringing our nation and our world together in the spirit of the neighbor we are admonished to love as ourselves. We are ushering in the golden days of the Golden Rule. Within the encircling arc of every home radiates the joy and hope of having ever close to us the companionship and voices of folks and friends, building up the magic of home memories forever blest.

HOW I GOT MY AMATEUR LICENSE

Continued from page 37

for the crowd. That night when I got home I called on another fellow, and together we started building a simple crystal set. We took a third fellow into the scheme, because his backyard provided an ideal place for our aerial. The first night after we had completed the set we "listened in." We could hear a loud humming, but no signals. The next afternoon one of the boys who had a set in operation came and discovered the trouble, which he fixed after a few hours.

I later built a set of my own, which consisted of a tuning coil, crystal detector, condenser and a pair of Murdock "58's." I mounted all the apparatus on a base board, so that the coil was in a convenient position for tuning. The detector was placed on one side near the back of the board where it could be adjusted easily, and at the same time would be out of the way. The aerial consisted of four wires about twenty-six feet long, and a water pipe ground was used. With this set I could hear WGI very loud and clear, and when the weather was good I could sometimes get the time signals from NAA.

At the beginning of school the next fall I built a portable crystal set in a box, which contained a compartment for the coil of wire to be used as the aerial, and the insulators. When my large aerial was blown down in a storm, I put up the portable one and obtained very good results.

About this time my father began to get interested in wireless and finally induced me to study and obtain a license. I attended the Eastern Radio Institute at Boston each Saturday forenoon for about three months, and in February took a written examination and the sending test. When I left I had a first-class amateur radio operator's license. I received my station license a few days later, and immediately constructed a sending set, with which I am able to talk with nearby stations.

My father then purchased additional apparatus and we built a single tube regenerative set, consisting of a three-layer coil tapped to give results on one hundred and fifty to twenty-six hundred meters. We used a series condenser and a variometer ball. Both the coil and the ball I wound myself. The tube controls were put in a separate panel.

With this set I am able to get WGI very loud and clear, and also WGY and NAA very satisfactory. When the weather is good KDKA and WJZ come in loud enough to be understood.

Radio is indeed fascinating and my father and I are constantly experimenting to secure greater distance and efficiency from our instruments.

RECEIVING SET EFFICIENCY

Continued from page 37

primary, secondary, and tickler. The primary moved inside the secondary exactly as it moves on a loose coupler, and the tickler moved outside the secondary. This instrument was hard to tune partly because it could not be shielded with tinfoil and also because a small movement would change its wave length too much.

The next set I made consisted of a variocoupler and two variometers (the most common type now used). Although this set was very good in some ways, I disliked it for two reasons. First of all it had too many knobs to control quickly. The second and most important reason was that it is not possible to place the plate variometer (the tickler close enough to the secondary to catch the maximum amount of radiations, which is the principle of a regenerative set. I then tried to think of a way to place the primary, secondary, and tickler coils close enough together to regenerate with (Continued on page 45)

Problems of Airplane Radio

By "BILLY" McDONNELL

IN these days use of the radio phone between aeroplanes and land stations, or between plane and plane, has become quite common. The first question that occurs to the average novice, after he once understands the principle of wireless telegraphy, is that of how it is possible for moving planes, with no connection to the earth, to transmit and receive radio messages.

In a general way the answer is simple enough. It is merely a question of using whatever metal is available in lieu of the customary ground connection. This question of grounding a moving

antenna for our longer wave lengths. The antenna was on a reel quite like a large fish reel, and a weight was fastened to the end, shaped like a little fish to cut down wind resistance. The little 'fish' caused us much trouble until we learned how to make it secure. One day its weight broke away from one of our planes and crashed through the roof of a house below. A short time later the camp adjutant was listening to the complaint of an enraged householder, who cried the practice of bomb-dropping above the homes of citizens.

"Thunder storms, which are frequent in the summer, make radio work very difficult because the air is filled with static electricity, with which the clouds are charged, and the discharge of which is responsible for lightning and thunder. There is also considerable lightning hazard when flying in a storm.

"One day while we were conducting tests from a plane to the radio station on the flying field a storm came up. I was several thousand feet up in the air, and about a mile out over the ocean. A very high wind blew up from the West and our plane could make no headway. We bucked the storm till our gasoline supply was almost exhausted. The air became charged with static electricity, interfering with our radio instruments, and it was impossible to talk with the ground station.

"Now, an aeroplane is not a seaplane, and an aeroplane can stay afloat on water only a very few moments. It seemed as if there was a pretty good certainty that we must perish in a mighty short time. My one desire was to let the ground station know of our plight, so that they might send a launch out from the shore in an endeavor to pick us up after the plane hit the water. It was almost impossible to get anything at all over the 'phones, and just as I was about to give up I heard ever so faintly the message: 'Ground station talking. A storm is upon us. We are closing our station.'

"I spoke to the pilot in front of me by means of the wire phone, which connected us, and told him just what we were up against. Then I reeled up our antenna and we dove down into the clouds in the general direction of land. In a lower stratum we found rain, but less wind, and, thanks to fate, our engine still had enough kick left to take us safely to our hangars."

When Lieutenant Berthold completed his field tests he was sent to Washington where he compiled a set of pamphlets covering the operation, maintenance and installation of wireless phone apparatus. Since the armistice he has been chief instructor of radio in the aviation section of the New York Police Reserve, holding the rank of captain.

It seems as if every radio expert of today started studying the fascinating game of wireless in his early childhood, and Mr. Berthold is no exception. He was especially fortunate, due to the fact that his father was engaged in experimental work along electrical lines when Mr. Berthold was a boy. His first toy, in fact, was a telephone magneto box, complete with a tiny bell. It was his first introduction to electricity, and an indicator of the radio phone work to follow.

During his high school days, about 1900, when wireless was practically unknown outside the circle of scientists, he built a simple receiving set. He soon had the instruments perfected so that he could "listen in" to the Charlestown (Massachusetts) Navy Yard with little trouble. The construction of a (Continued on page 47)



O. H. BERTHOLD, graduate electrical engineer, who served as officer in the radio development section of the Signal Corp during the war. He conducted many radio phone experiments in the air. At present he is chief instructor of radio in the New York Police Reserve

plane has brought up several others in the field of aero-telephony.

O. H. Berthold, formerly an officer in the radio development section of the United States Army, and at present chief radio instructor in the New York Police Reserves, explained the principles of radio as applied to air vehicles in an interview.

"To many amateurs the question of grounding an air or seaplane would be a difficult one to answer. It is done in the following way: All 'landing,' 'flying wires' and other metal parts are connected together to form, as it were, one set of plates in a condenser. The other set is, of course, the antenna.

"The principle of radio is exactly similar to that of the Leyden jar. The antenna and ground are the two plates of tinfoil, and the air the space between them.

"On the aeroplane the antenna is not strung up on poles, as it is on a land station, but a trailing antenna is used. In making tests in army service we used a three-hundred foot trail-

An interview with Hiram Percy Maxim

A "Maxim Silencer" for Radio Receiving

Problem of "selective receiving" to eliminate static noises and code messages in midst of concert program is discussed by noted inventor

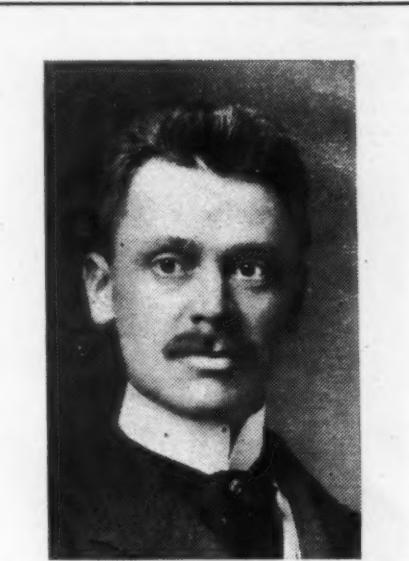
By J. ELLIS HUMPHREY

THIS month I have talked with a number of radio engineers over the interesting question of solving interference in radio messages by the application of some principle which would make possible the choosing of the particular "band" of waves desired to the exclusion of all others. The question of eliminating static and other interference in short-wave receiving sets has not yet been solved, and is one of the big problems before the radio world today. At first glance it would appear that the resemblance between static waves and those emitted by a sending station would render impossible any effort to receive one to the exclusion of the other, but experts in the radio field feel confident that the solution of this problem is really a matter of time.

After having discussed this question with several experts at the Boston Radio Exposition, I interviewed Hiram Maxim at his laboratories in Hartford.

"The problem of what I call 'selective receiving' is certainly an important one to the future of radio, and one to which I have given much thought," said Mr. Maxim. "About eighteen months ago we started experiments here to determine whether some means could not be employed to overcome static and other interference when receiving radio messages. To date I have nothing to offer the public, except to say that I am sure there is a solution for this problem, and we are keeping it constantly in mind in our experimental work here."

"We cannot say that anything is impossible in wireless. When Armstrong invented his regenerative receiving apparatus he announced that it could be used only in long wave work, but it was not long before Godley applied the principle to short wave reception as well. Already, the problem of static interference has been partly overcome in the long wave zone. Something may be done soon to make this elimina-



HIRAM PERCY MAXIM, inventor of the famous Maxim Silencer for rifles, is not often thought of in connection with radio development, but as a matter of fact he was one of the first American scientists to become interested in radio, and has been the president of the American Radio Relay League, an organization of American wireless amateurs, since its inception in 1914. For the past eighteen months he has conducted experiments in his laboratories at Hartford, Connecticut, with an idea of securing what he calls "selective receiving." Mr. Maxim graduated from the Massachusetts Institute of Technology in 1886 at the age of seventeen and was the youngest student in his class. He is the inventor of numerous electrical devices and ordnance instruments.

tion possible in short wave reception, the type familiar to broadcast fans.

"There is an interesting problem to consider in connection with 'selective receiving,' and that is whether the selectivity is to be in the audio or radio waves. As you know, the sound waves are transformed into radio waves through the transmitting device, and then changed back into sound waves which the ear can hear, through the medium of the receiving set. It is at this point of reception where the selectivity must occur. It is probable that the device which finally solves the problem, will be an electrical one, which forms a part of the receiving set, and which selects the waves desired before they are transformed into vocal or audible waves."

I asked Mr. Maxim if the gun silencer principle could not be applied to solve this problem.

"I understand that a device attempting to solve the selective wave problem by means of a mechanical device for blotting out certain sound waves was tested in New York recently, but not found practical.

"That is not the correct way to attack the trouble, I feel. What we must attempt to do is to catch the interference at the receptive point of the apparatus, rather than attempt to rectify the trouble after the radio waves have been transformed into sound waves. This means that the invention that will solve this problem will probably have to deal with the electrical radio waves, and not those which are audible to the human ear."

Mr. Maxim has maintained an active interest in radio for years, but always in an amateur way. He operates a transmitting station at the Hartford laboratories, where tests and experiments of all kinds have been carried out. He has never been connected with the manufacture or sale of radio apparatus, and therefore has maintained his amateur standing as president of American "hams" or amateur code and telephone operators.

A New Universe of Sound Revealed

Continued from page 39

miraculous qualities of the little tube. It is an invention on which a million dollars has been spent to bring it to perfection. It looks for all the world like a little camera, with a tiny receiver attached.

Through the amplification of tone waves by this wonderful device we can now listen to sounds which no human ears, even those normal and healthy, have heard since the world began. In the same manner those whose sense of hearing has been subnormal can now without effort hear sounds heretofore detected only by the perfect ear. The vacuum tube amplifier opens up an undreamed range of possibilities economically, sociologically, and to the same degree it leads the deaf from their dreary world of loneliness to the happy sphere blessed with the voices of friends, with music and with the vocal expression of thought, just as it did for Mr. Hanson's own mother.

Mr. Hanson is enthusiastic about the future developments of the vacuum tube. He calls it

the most important electrical development of the century so far.

"It seems to me that it will hold that position for a long time to come," he says.

"You see we do not have to stop with one tube when we amplify. We can pass the current on from one to another and to still another, constantly getting and controlling greater and greater power."

"Just see what this means! It is estimated that one unit of electrical energy is increased ten times by means of the vacuum tube amplifier. If this energy is compounded by six tubes successfully it means that you get an amplification of one million times the original sound."

"Can you imagine the possibilities involved in that statement? If I had a tuning fork I would show you something interesting by plucking its prongs so gently that they would give no audible sound. Then I can hold the imperceptibly vibrating fork close to the transmitter of the Vactaphone and you will hear a musical note."

"It may even be that we shall actually be able to hear things growing, to listen to the sounds made by the unfolding of the petals of a flower or the buds in the trees (Continued on page 49)

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Frank J. Moles, President; William McCaig, Operating Engineer. Station WRL.

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12 Meeting Street, Pawtucket, Rhode Island.

Charles O. Cressy, President; E. M. Woodruff, Treasurer; R. W. Farnum, Secretary. Station 1-CJ.

At present there are fifty-five members of this council, all citizen radio enthusiasts, holding meetings monthly at some one of Providence's leading hotels, and at each meeting a speaker is engaged.

A New Universe of Sound Revealed

Continued from page 42

as they burst open. We may soon be able to hear with human ear and a vacuum tube device every change that is taking place in matter.

"We were not able to telephone across the continent until the vacuum tube amplifier made it possible."

Already the vibrations set up by "tumbling fleas" have been amplified so that when the receiver was placed against a plate glass window, the terrific noise shattered the pane.

When the government station at Arlington talked with the wireless station on Eiffel Tower at Paris and the messages were overheard at a station in Honolulu, the same principle—that of the vacuum tube amplifier—was the vital feature in the equipment.

Probably because Mr. Hanson started experimenting when so young, he has a passion for helping "the kids" with their radio sets. At his laboratories in Reading he is constantly besieged by boys with their problems, and he answers them as thoroughly and as completely as if he were solving some world-wide system of communication.

At the Boston Radio Exposition held in May, he was the center of not only numerous radio experts but a never ending crowd of boys as well. In the booth of the Globe Phone Company, he rigged up a tiny broadcasting station from which messages were transmitted at such a high wave length that when they were picked up from a little six foot aerial above the booth there was none of the interference from the dozens of other broadcasting stations in operation or any other conflicting noises. Others were mystified by the clarity of the messages received from the tiny station and never guessed that the secret was the long wave length, for to transmit messages at such a low frequency would ordinarily be impossible except with the use of an aerial stretching farther than the entire length of Mechanics Building, where the exposition was held.

This same low-frequency or audio-frequency principle, is fundamental in the understanding of how radio works, and to grasp it is a big step toward entering the fraternity of wireless "bugs."

If we make a radio wave length long enough, its frequency or vibration becomes so slow that a human ear can hear it without the necessity of changing or transforming it in any way. We simply use an amplifier to make it sufficiently loud.

This system is another of Mr. Hanson's inventions. He calls it ground telegraphy. It was used effectively in France, where it was called telegraphic *par sol*, or T. P. S. A soldier desiring to receive word from headquarters drives an iron stake into a tree. To the stake a wire is connected, with an amplifier and receiver at the other end. He puts the receiver to his ear and listens. That is all there is to it. To draw an analogy, the tree acts as the "aerial," and the soldier himself is the "ground."

There are constant calls from Washington for Mr. Hanson, who volunteered his services to the Navy Department during the war. He spends part of his time there with Wendell L. Carlson, with whom he worked at that time. The remainder of his time is spent in research work in the Reading laboratories. A few months ago, Mr. Hanson and Mr. Carlson found still another use for the vacuum tube. By means of placing it in the circuit for therapeutic work the unpleasant twichings and jerkings to which it has heretofore been necessary to submit patients have been completely eliminated. The tube is also employed in detecting changes of temperature. It can be used in locating oil and also ore bodies. It has already been used successfully by vessels in locating German mines and disastrous tragedies resulting from explosions have been avoided.

Dozens of new applications are being perfected



Guardians of the Circuits

The telephone at your elbow seems so simple an instrument, it does its work so quietly and quickly, that it is difficult to realize the vast and complex equipment, the delicate and manifold adjustments, the ceaseless human care "behind the scenes" in the central offices.

Behind the scenes is the terminal of all the underground and overhead lines on the streets and highways. Here are the cable vaults; the great steel frames containing the thousands of separate wires and fuses for the subscribers' lines; the dynamos and storage batteries; the giant switchboards through which your telephone is connected with the other thirteen million telephones in the Bell System.

And here, in charge of this equip-

ment, are the guardians of the circuits—the wire chief and his assistants—master electricians and experts in telephony. Their first duty is the prevention of "trouble." By day and by night they are constantly testing the central office equipment, the overhead and underground lines, the subscribers' individual wires. And when, from some cause beyond control, "trouble" does occur, nine times out of ten it is repaired before the telephone subscriber suffers the slightest inconvenience.

It is the skill of the men behind the scenes, together with scientific development and construction, efficient maintenance and operation, which make it possible for you to rely upon the telephone day and night.

BELL SYSTEM

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy, One System, Universal Service, and all directed toward Better Service



by this American inventor. A radio phonograph which will contain the entire set of receiving instruments and a sensitive loop aerial all within the cabinet is already an accomplished fact. The cabinet can be moved about from room to room, carried to camp in an automobile or placed in a motor boat with no thought of bothersome aerial or ground connections. It is on the radio phonograph that Mr. Hanson's latest work has been done.

I asked Mr. Hansen to tell me along what lines the next big step in radio development would come—a step similar to the revolutionary system of regenerative wiring by Armstrong or the application of the vacuum tube to radio.

"The whole direction which radio development will take in the immediate future is in the zone of long distance communication," he said. "As you know the average transmission station which operates on short wave lengths experiences considerable trouble from static electricity

interference and there are many other conflicting noises.

"The waves from these stations travel at high frequency—that is they travel along through space in short jumps just as a ball is bounced along the sidewalk. But when we transmit a message at a very high wave length, these jumps are a matter of miles, not yards. To transmit on a wave length of thirty thousand meters as was done in the tiny broadcasting station at the Boston Exposition, it means that the frequency of the jumps is very low and that the waves bound along through space in jumps of about twenty miles. When a message travels on such a high wave length much of the interference which is encountered in more common work is eradicated. In this fact lies the future of radio as applied to world communication. It will enable us to talk without wires around the globe; to send our voices to districts which wires have never reached and never can reach."

"Can you summarize the immediate future of the vacuum tube?" I asked him.

"Well, it will help the deaf to hear," he replied. "It will make your voice audible across the continent and around the globe as well; it will enable vessels to find their way through fog and the darkness; it will save the lives of people in aeroplanes; it will make wireless telegraphy far more efficient; it will help to win wars; it will enable one person to talk directly to thousands in an ordinary tone of voice, as President Harding did on inauguration day and on armistice day, only on a far greater scale."

"If the systems already perfected are put into use before March 4, 1925, it will be possible for people over the entire globe to listen to the next inaugural address."

Affairs and Folks Continued from page 36

"There are four essential requisites to keep in mind when furnishing a home: consistency, balance, harmony, and repose. Let us not have our homes look like checker boards. Neutral foundations with colors introduced in things that are changeable are the best suggestions to follow. Avoid lambrequins on low windows and strive for simplicity rather than for ornamentation. To quote an instructor with whom I once studied: 'Don't be afraid to crowd your attic.'

"I am reminded of a delightful city apartment, with living room rather small, having a group of window at one end. The walls, wood work, and wood mantle were painted *cafe-au-lait*, the carpet was castor color, the window treatment was most to be commended: Soft silks of a neutral tone, almost identical in color with the walls, chosen for overhangings, hung from painted poles and exposed painted rings. The glass curtains were ecru colored casement cloth, with one and one-half inch hems weighted. One was instantly impressed with the repose and spaciousness of the room. The sofa covering and table cover were French blue, a large overstuffed chair and hassock dark brown velvet, another overstuffed chair was of plain brown tapestry with needle point motifs, a straight chair had a wool tapestry seat with soft rose and French blue predominating. The lamp shades all about the room were putty shade on the outside and peach color for the interlining. Thus was the ensemble most acceptable.

"Small rooms are often no larger in appearance than some brilliantly-colored rug sharply defined against a yellow floor. Oriental rugs are lovely if they are carpet size, small in design and soft in color. Discomfort can be eliminated, time and money saved if when furnishing a home we would employ the services of a good decorator or go to the library or book store for authentic volumes on furnishings and decorations. Study scale and balance as well as harmony in colors. Through the same medium acquire a knowledge of fabric and design. It is a study that is fascinating beyond words to describe, and is of interest to every member of the family. You will find examples of living rooms that uphold family dignity as well as bespeak inviting hospitality. We need not adopt the lounging men's-clubhouse variety of furniture, with seats so deep a lady must sit on the edge to insure comfort.

"High-class film companies are employing for their best pictures professional interior decorators to portray effects that satisfy the most fastidious.

"On the stage, in Ethel Barrymore's 'Declasse,' we had a charming example of the English drawing room, where dignity, comfort, and art were combined."

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Winter Resort—DE SOTO HOTEL—Savannah, Ga.
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The Record-smashing American "Ham" Continued from page 38

vigils under most trying circumstances were forgotten amidst the overwhelming joy of the moment, a joy which I was struggling to hold within!

"I suggested hot coffee and Pearson volunteered to warm it on our stove. He had a pot and a bottle in his hands when I called sharply to him to resume watch. Our American friend was at it again and his signal had doubled in strength."

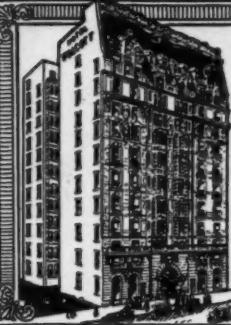
Night after night the listening continued and when the tests were completed over thirty American amateurs had been heard. One station in Ontario was picked up, another at Indianapolis, still another in Pittsburg, and there were many in the New England States and along the Atlantic coast. Eight British amateurs caught some of the American signals.

So successful were the tests that there is a lot of talk now about regular scheduled traffic of amateur messages from America to England.

Not content with the six-and-one-half-minute relay of a message from coast to coast and back again the league now is aiming at Paris to San Francisco and return in less than ten minutes. Mr. Maxim, the president, feels sure it can be done.

Is there any limit to the accomplishment of the American Amateur Radio Bug? Apparently not. What the American "ham" sets out to do he usually gets done, and if he must fire a message from the French capital to our movie colonies and back again in the time it takes to glance over the headlines of a newspaper, well then, he must.

But will he stop there? No, for the American "ham," paradoxical as it may seem, is a jump or two ahead of the radio messages he transmits.



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The Vactuphone is the first and only hearing instrument using the vacuum tube, the amplifying device that made the wireless telephone possible.

Millions of dollars have been spent in its development. The Vacuum Tube was used to amplify President Harding's voice at his inauguration and on Armistice Day.

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HEARING IS BELIEVING

"I wish to say that the Vactuphone is superior in all ways to any hearing instrument that I have ever before tried, and I am more than delighted with it. I consider the cost small indeed for the pleasures of life which it has brought back to me. I wish that all deaf persons might possess such a help."

(Signed) _____

Lorain, Ohio.

"I am very much pleased with the Vactuphone. It enables me to chat quietly with my friends. The Vactuphone is certainly far superior to anything on the market today as regards clearness, lack of extraneous noises, and in sound magnifying power. My father is also delighted with it and expects to order one a little later."

(Signed) _____

Minneapolis, Minn.

"I am pleased to state that my mother finds the Vactuphone highly satisfactory in every detail, and it answers her purpose far better than any instrument she has ever tried. I will be pleased to give you a real testimonial any time you may call for it."

(Signed) _____

Cleveland, Ohio.

The originals of the above are in our files and the names of writers will be given to you on request.

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RECEIVING SET EFFICIENCY

Continued from page 41

the greatest power. I thought of winding two coils on the same tube and having a rotor inside, or of having two rotors and one coil on the outside of the tube, but there were limitations to both methods.

It was then in talking with a man well versed in radio that I learned of the single circuit hook-up. The single circuit hook-up is the method of connecting a variocoupler or variable condenser, and an audion bulb, to give for better results than the ordinary so-called regenerative set. The principle of the single circuit is as follows: the outside of the variocoupler is the primary (there is no secondary), and the rotor is the tickler coil which catches the radiations directly from the primary or power circuit, and passes them on to the plate. By this method all power is used. This circuit makes the instruments simple, compact and easy to handle. Any standard variocoupler tapped every five or eight turns will do. The hook-up for a two-stage amplifier is the same as for its variocoupler variometer set.

The trouble with the majority of the ready-made sets now on the market is either that they have too many knobs and switches to handle easily and quickly; or they have too few, and jump off telephone signals when slightly moved.

My instrument for varying filament voltage consists of the usual rheostat connected with an instrument I made by fastening a single piece of resistance wire in a groove made in the circumference of a fiber disk, and having a spring brass pointer in contact with the wire. This allows me to vary the resistance by a small section of a single piece of resistance wire as well as by an entire turn on the usual rheostat.

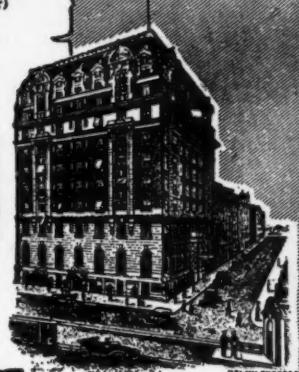
One thing which puzzled me at first was how to determine the correct size of the grid condenser and of the grid leak for my detector bulb. First I used on my set a small variable condenser and a variable grid leak. Later in experimenting with the grid leak I found that for my particular bulb the grid leak was not necessary. Then as I wished to use a fixed condenser, not a variable one, I experimented with two or three fixed condensers. The ordinary grid condenser would not work at all with my bulb. So I tried a condenser about twice the size of the usual one with perfect results.

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UNION EXPRESS STATION

Since no two bulbs are exactly alike, amateurs will find it advantageous to experiment with the size of his grid condenser and of his grid leak.

A wireless set should be shielded, that is, the cabinet which holds the coils and the condensers should be lined with tinfoil and the tinfoil should be connected with the ground binding post. This shielding eliminates the unpleasant capacitive effect of the hands when turning.

It is necessary to become accustomed to the operation of any set before expecting maximum results. On some days in a certain area no one can receive telephone with any satisfaction.

To conclude—if you want to do anything else, do not take up radio, for in spite of all drawbacks and uncertainties I think you will find it an all-absorbing interest.

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